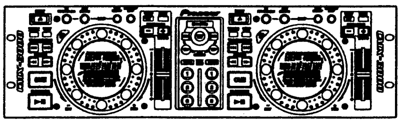
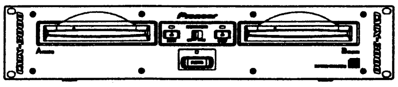
Pioneer sound.vision.soul

Service Manual


CU-V163


CMX-3000

ORDER NO.
RRV2537

COMPACT DISC PLAYER
CMX-3000
REMOTE CONTROLLER
CU-V163

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	Remarks
	CMX-3000	CU-V163		
KUCXJ	○	-	AC120V	
WYXJ	○	-	AC220- 240V	
RLBXJ	○	-	AC110-120V/ 220-240V	
——	-	○	DC Power supply from other system	

CONTENTS

1. SAFETY INFORMATION ········· 2
2. EXPLODED VIEWS AND PARTS LIST ········· 5
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM 12
4. PCB CONNECTION DIAGRAM ········· 35
5. PCB PARTS LIST ········· 50
6. ADJUSTMENT ········· 55
7. GENERAL INFORMATION ········· 57
   7.1 DIAGNOSIS ········· 57
      7.1.1 SERVICE MODE ········· 57
      7.1.2 STARTING SEQUENCE ········· 62
      7.1.3 DISASSEMBLY ········· 63
   7.2 PARTS ········· 68
      7.2.1 IC ········· 68
8. PANEL FACILITIES AND SPECIFICATIONS ········· 82

For details, refer to "Important symbols for good services" on "**service information**".

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols ■⊞ (fast operating fuse) and/or ■⊠ (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible ■⊞ (fusible de type rapide) et/ou ■⊠ (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

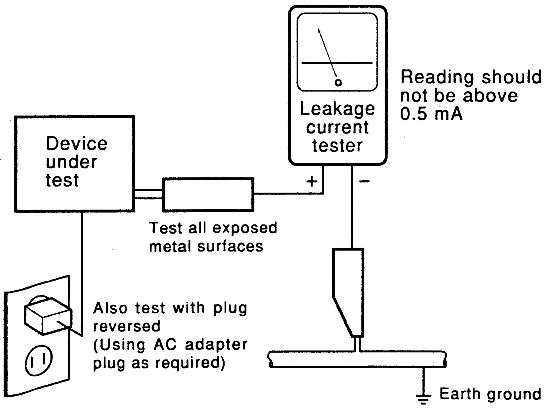
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Reading should not be above 0.5 mA
Leakage current tester
+
−
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage , etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

IMPORTANT

THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS

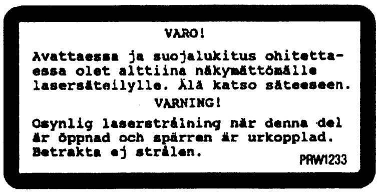
MAXIMUM OUTPUT POWER: 5 mW
WAVELENGTH: 780 – 785 nm

WARNING !

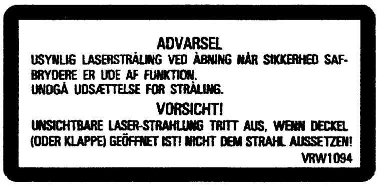
The AEL(accessible emission level) of the laser power output is less then **CLASS 1** but the laser component is capable of emitting radiation exceeding the limit for **CLASS 1.**
A specially instructed person should servicing operation of the apparatus.

LABEL CHECK

CMX-3000/ WYXJ type Only

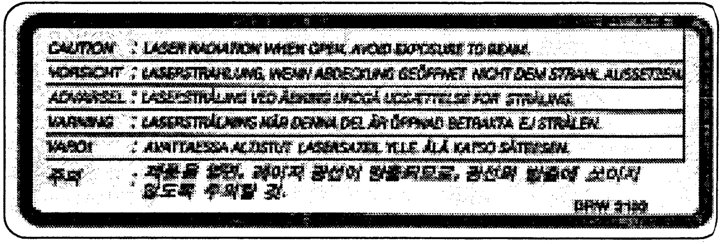


VARO!
Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.
VARNING!
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.
PRW1233

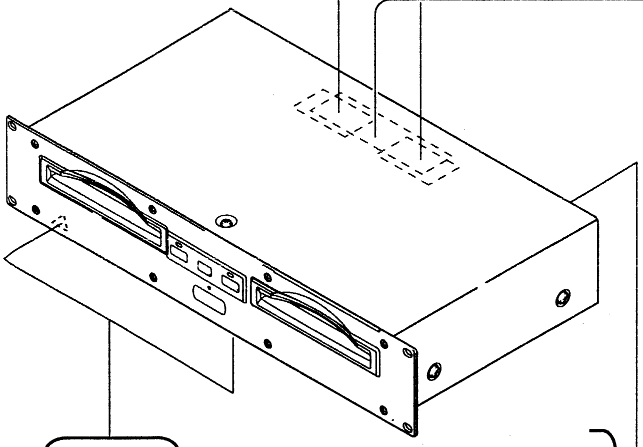


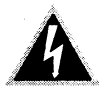
ADVARSEL
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHED SAFBRYDERE ER UDE AF FUNKTION.
UNDGÅ UDSÆTTELSE FOR STRÅLING.
VORSICHT!
UNSICHTBARE LASER-STRAHLUNG TRITT AUS, WENN DECKEL (ODER KLAPPE) GEÖFFNET IST! NICHT DEM STRAHL AUSSETZEN!
VRW1094

CMX-3000/ RLBXJ type Only



CAUTION : LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM.
VORSICHT : LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN
ADVARSEL : LASERSTRÅLING VED ÅBNING UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARNING : LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD BETRAKTA EJ STRÅLEN.
VARO! : AVATTAESSA ALTISTUT LASERSÄTEILYLLE ÄLÄ KATSO SÄTEESEEN.
주의 : [illegible]
[illegible]





CMX-3000/ KUCXJ type Only

CLASS 1
LASER PRODUCT

Printed on the Rear Panel.

Additional Laser Caution

1. Laser Interlock Mechanism
   The position of the switch (S801,S901) for detecting loading completion is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch is not in $\overline{\text{LPS1}}$ terminal side (when the mechanism is not clamped and $\overline{\text{LPS1}}$ signal is high level.) Thus, the interlock will no longer function if the switch is deliberately set to $\overline{\text{LPS1}}$ terminal side. (if $\overline{\text{LPS1}}$ signal is low level).
   In the test mode* the interlock mechanism will not function.
   Laser diode oscillation will continue, if pin 9 of TA2153FN (IC1010, IC1003) on the MAIN ASSY is connected to GND, or pin 10 of IC1010, IC1003 ($\overline{\text{LDON}}$) is connected to low level (ON), or else the terminals of Q1003, Q1229 are shorted to each other (fault condition).
   Note: S801, IC1010 and Q1003 (Player A Side)
   S901, IC1003 and Q1229 (Player B side)
2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

* : Refer to page 55.

■ SERVICE INFORMATION

[Important symbols for good services]
In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely.
When you find the procedures bearing any of the symbols, be sure to fulfill them:

1. Product safety

You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

2. Adjustments

To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

3. Cleaning

For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

4. Shipping mode and shipping screws

To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

5. Lubricants, glues, and replacement parts

Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount.For replacement parts or tools, the prescribed ones should be used.

[NOTES ON SERVICING]

■ CLEARNING

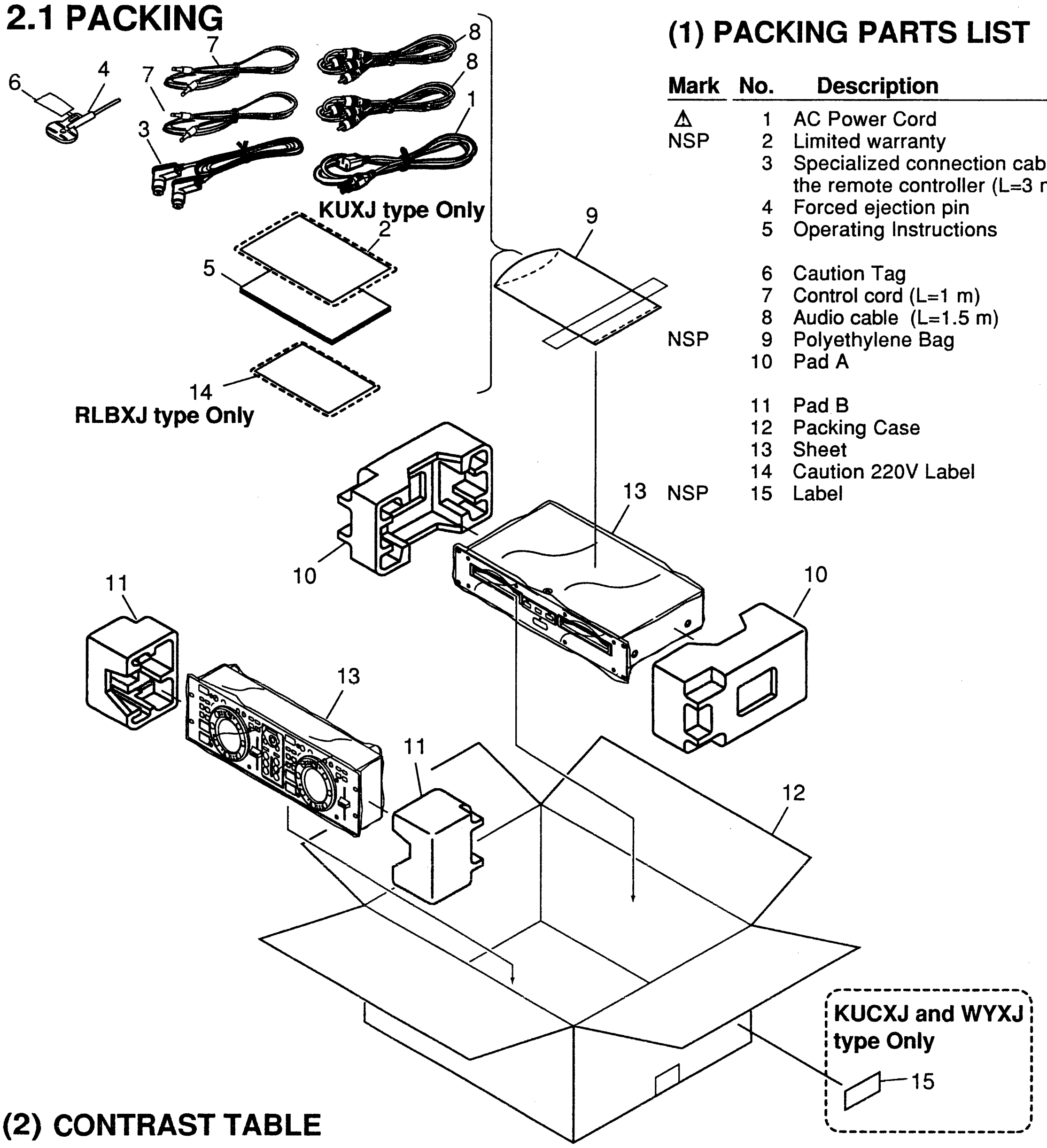
Before shipping out the product, be sure to clean the following positions by using the prescribed cleaning tools:

Position to be cleaned	Cleaning tools
Pickup leneses	Cleaning liquid : GEM1004 Cleaning paper : GED-008

2. EXPLODED VIEWS AND PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
● *Screws adjacent to ▼ mark on the product are used for disassembly.*
● *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

2.1 PACKING



(1) PACKING PARTS LIST

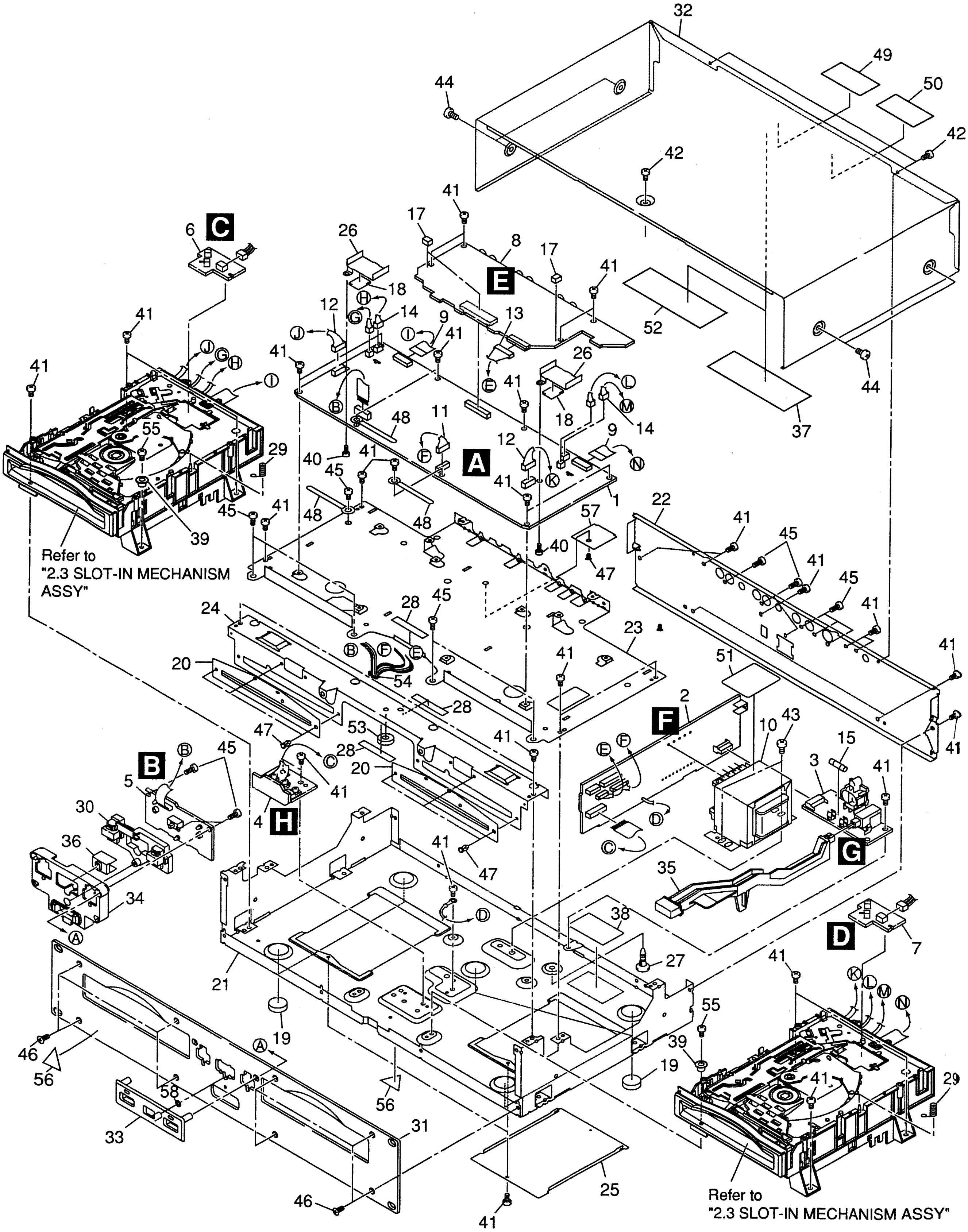
Mark	No.	Description	Part No.
⚠	1	AC Power Cord	See Contrast table (2)
NSP	2	Limited warranty	See Contrast table (2)
	3	Specialized connection cable for the remote controller (L=3 m)	DDE1122
	4	Forced ejection pin	DEX1013
	5	Operating Instructions	See Contrast table (2)
	6	Caution Tag	DRW1897
	7	Control cord (L=1 m)	PDE1267
	8	Audio cable (L=1.5 m)	VDE1064
NSP	9	Polyethylene Bag	Z21-038
	10	Pad A	DHA1529
	11	Pad B	DHA1530
	12	Packing Case	See Contrast table (2)
	13	Sheet	RHX1006
	14	Caution 220V Label	See Contrast table (2)
NSP	15	Label	See Contrast table (2)

(2) CONTRAST TABLE

CMX-3000/KUXJ, WYXJ and RLBXJ are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.			Remarks
			KUCXJ Type	WYXJ Type	RLBXJ Type	
⚠	1	AC Power Cord	ADG7022	ADG1154	ADG1154	
NSP	2	Limited warranty	ARY7043	Not used	Not used	
	5	Operating Instructions (English)	DRB1307	Not used	Not used	
	5	Operating Instructions (English/ French/ German/ Italian/ Dutch/ Spanish)	Not used	DRB1306	Not used	
	5	Operating Instructions (English/ Spanish/ Chinese)	Not used	Not used	DRB1308	
	12	Packing Case	DHG2160	DHG2158	DHG2161	
	14	Caution 220V Label	Not used	Not used	ARR1003	
NSP	15	Label	VRW1629	VRW1629	Not used	

2.2 EXTERIOR SECTION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Refer to
"2.3 SLOT-IN MECHANISM ASSY"
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Refer to
"2.3 SLOT-IN MECHANISM ASSY"

(1) EXTERIOR SECTION PARTS LIST

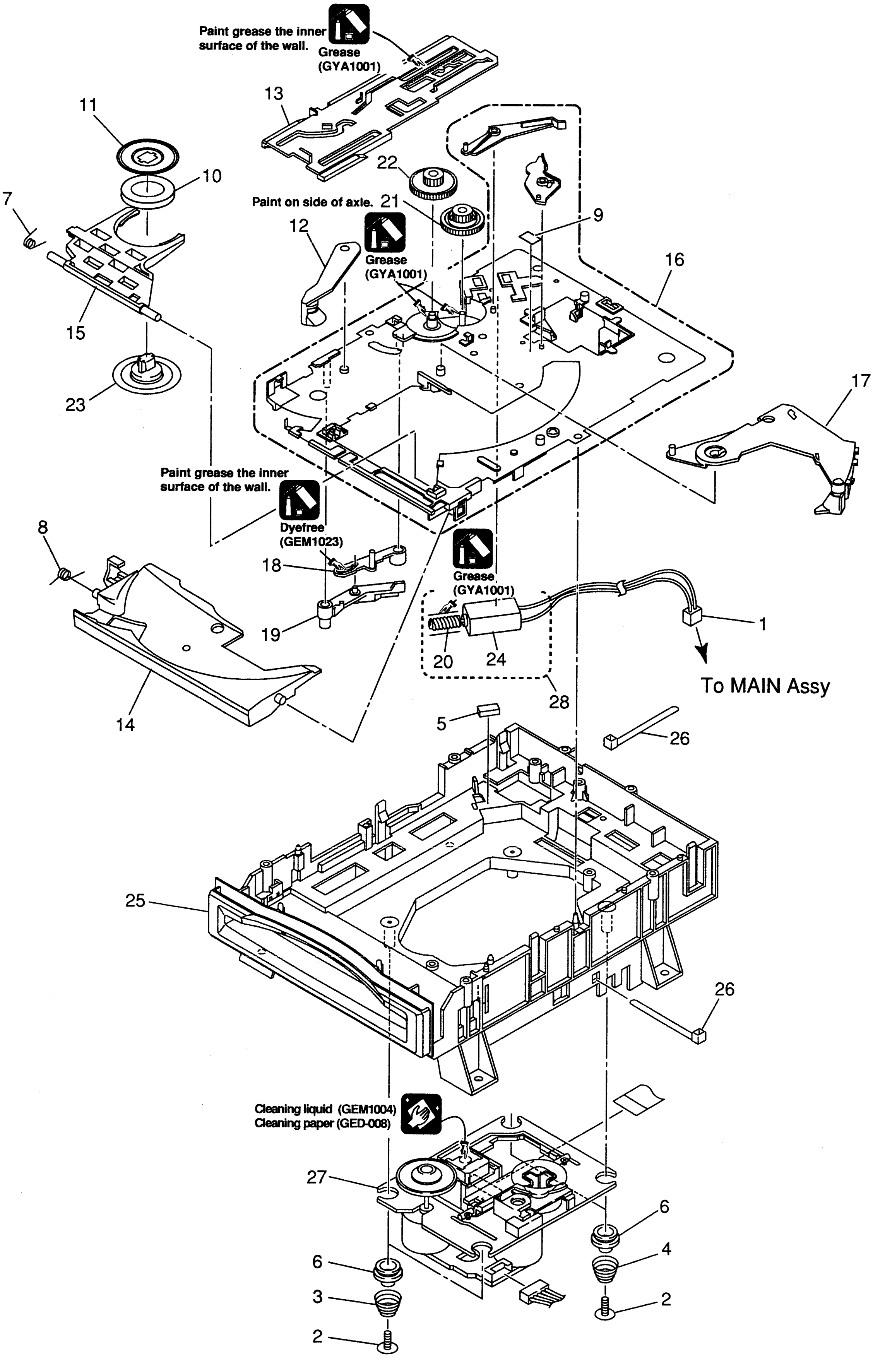
Mark	No.	Description	Part No.
	1	MAIN ASSY	DWG1556
	2	PWRB ASSY	See Contrast table (2)
	3	ACIN ASSY	See Contrast table (2)
	4	REGB ASSY	See Contrast table (2)
	5	FRSW ASSY	DWS1314
	6	SLM1 ASSY	DWS1315
	7	SLM2 ASSY	DWS1316
	8	JACB ASSY	See Contrast table (2)
	9	Leadcard 16p	DDD1194
⚠	10	Power Transfomer	See Contrast table (2)
	11	Connector Ass'y	PF05FE-D17
	12	Connect0r Ass'y (6p)	PF06PP-B47
	13	Connector Assy	PF09EE-D25
	14	Connector Ass'y	PG03KK-E15
⚠	15	Fuse (FU101)	See Contrast table (2)
	16	•••••	
	17	Rubber Spacer	DEB1455
NSP	18	Silicon Rubber D5 L	DEB1456
	19	Insulator	DEC2348
	20	Front Sheet B	DEC2467
NSP	21	Chassis	DNA1277
	22	Rear Panel	See Contrast table (2)
	23	PCB Frame	DNH2502
	24	Panel Stay	DNH2503
	25	Bottom Plate	DNH2505
	26	Heat Sink	DNH2508
	27	Locking Card Spacer	VEC1596
	28	Sheet	DED1159
	29	Earth Spring	DBH1398
	30	Eject Knob	DEB1503
	31	Front Panel	DNB1098
	32	Bonnet Case	DNE1409
	33	Function Panel	DNK3944
	34	Power Knob Caver	DNK3945
	35	Power Knob	DNK3946
	36	Slide SW Knob	DNK3947
	37	65 Label	See Contrast table (2)
NSP	38	Label	VRW-548
	39	POM Bush (M3)	DEC2397
	40	Screw	BBZ26P060FMC
	41	Screw	BBZ30P060FMC
	42	Screw	BBZ30P060FZK
	43	Screw	BBZ40P060FMC
	44	Screw	BBZ40P060FZK
	45	Screw	BPZ30P080FZK
	46	Screw	CBZ30P080FZK
	47	Rivet (Plastic)	RBM-003
	48	Cord Clamper (Steel)	RNH-184
	49	Caution Label HE	See Contrast table (2)
	50	Caution Label	See Contrast table (2)
	51	Trans Sheet	DEC2280
	52	Caution Label	See Contrast table (2)
	53	Screw Guard	DEB1447
	54	Binder	ZCA-SKB90BK
	55	Screw	BBZ30P080FMC
NSP	56	Caution Label	See Contrast table (2)
	57	Protect Sheet	See Contrast table (2)
	58	Spacer (PEE)	DEC2470

(2) CONTRAST TABLE

CMX-3000/KUXJ, WYXJ and RLBXJ are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.			Remarks
			KUCXJ Type	WYXJ Type	RLBXJ Type	
	2	PWRB ASSY	DWR1345	DWR1345	DWR1348	
	3	ACIN ASSY	DWR1349	DWR1346	DWR1346	
	4	REGB ASSY	DWR1357	DWR1347	DWR1347	
	8	JACB ASSY	DWX2214	DWX2200	DWX2200	
⚠	10	Power Transfomer (AC120V)	DTT1161	Not used	Not used	
⚠	10	Power Transfomer (AC220-240V)	Not used	DTT1160	Not used	
⚠	10	Power Transfomer (AC110-120V/220-240V)	Not used	Not used	DTT1162	
⚠	15	Fuse (FU101: 1.6A)	REK1077	Not used	Not used	
⚠	15	Fuse (FU101: 1.0A)	Not used	REK1022	REK1022	
	22	Rear Panel	DNC1586	DNC1585	DNC1587	
	37	65 Label	ARW7050	Not used	Not used	
	49	Caution Label HE	Not used	PRW1233	Not used	
	50	Caution Label	Not used	VRW1094	Not used	
	52	Caution Label	Not used	Not used	DRW2102	
NSP	56	Caution Label	DRW1975	Not used	Not used	
	57	Protect Sheet	Not used	DEC2466	DEC2466	

2.3 SLOT-IN MECHANISM SECTION



Paint grease the inner surface of the wall. Grease (GYA1001)

Paint on side of axle. Grease (GYA1001)

Paint grease the inner surface of the wall. Dyefree (GEM1023)

Grease (GYA1001)

To MAIN Assy

Cleaning liquid (GEM1004)
Cleaning paper (GED-008)

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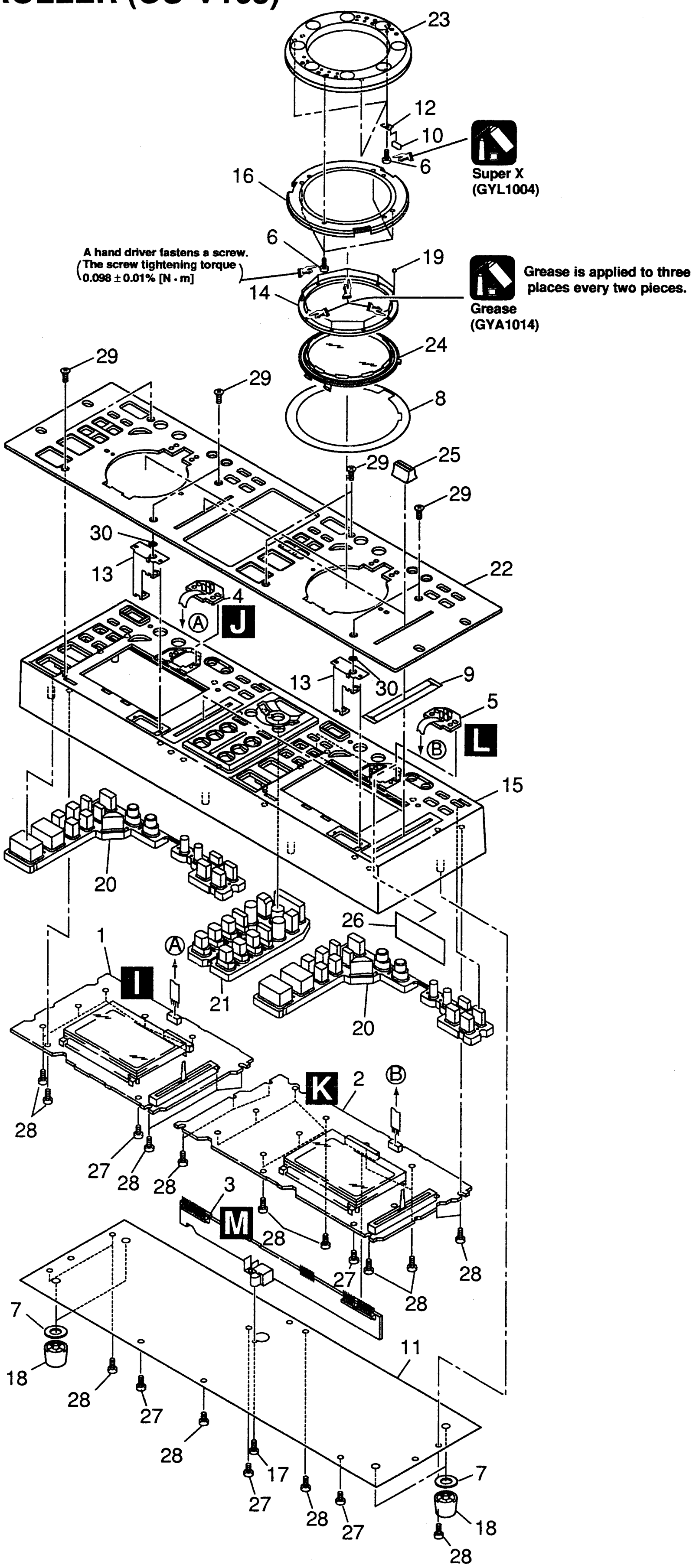
● SLOT-IN MECHANISM SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Connector Ass'y	DKP3565
	2	Float Fastener	DBA1139
	3	Float Spring F	DBH1491
	4	Float Spring R	DBH1492
	5	Spacer Por (T3)	DEB1467
	6	Float Rubber	DEB1506
	7	Clamp Spring	DBH1374
	8	Guide Spring	DBH1375
	9	Sw.Lever Spacer (Pet)	DEC2420
	10	Clamp Magnet	DMG1008
	11	Yoke	DNH2504
	12	Loading Lever	DNK3406
	13	Main Cam	DNK3407
	14	Disc Guide	DNK3478
	15	Clamp Arm	DNK3576
	16	Loading Base Assy-S	DEA1022
	17	Eject Lever	DNK3684
	18	Lever AP	DNK3835
	19	Lever BP	DNK3836
NSP	20	Worm Gear	DNK3410
	21	Loading Gear	DNK3409
	22	Drive Gear	DNK3565
	23	Clamper	DNK3949
NSP	24	Loading Motor	DXM1173
	25	Mecha Base	DNK3948
	26	Binder	ZCA-SKB90BK
	27	CD Mechanism	DA11T3CNPIO
	28	Loading Motor Assy-S	DXX2510

2.4 REMOTE CONTROLLER (CU-V163)



A hand driver fastens a screw.
(The screw tightening torque 0.098 ± 0.01% [N · m])

Super X (GYL1004)

Grease is applied to three places every two pieces.

Grease (GYA1014)

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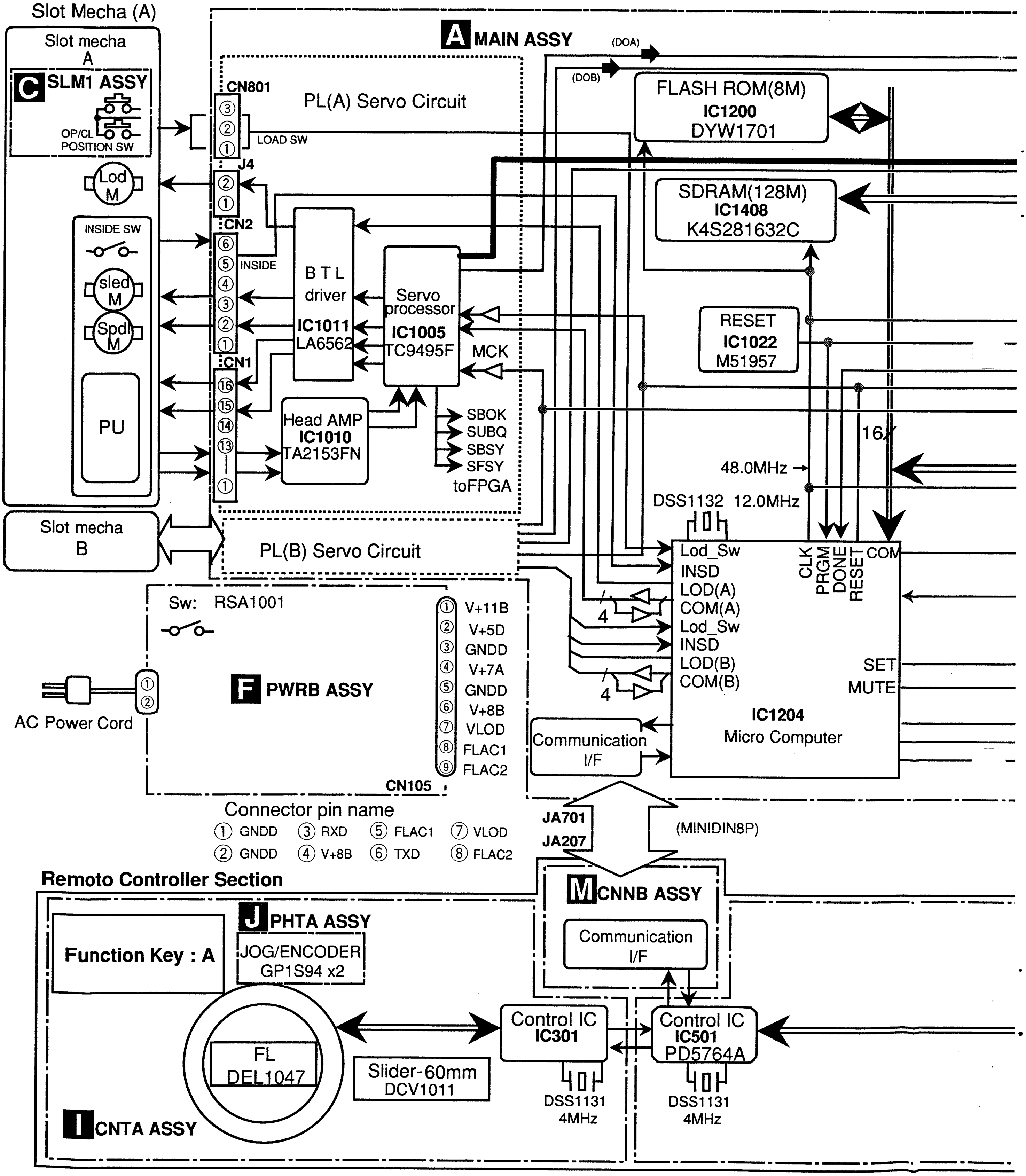
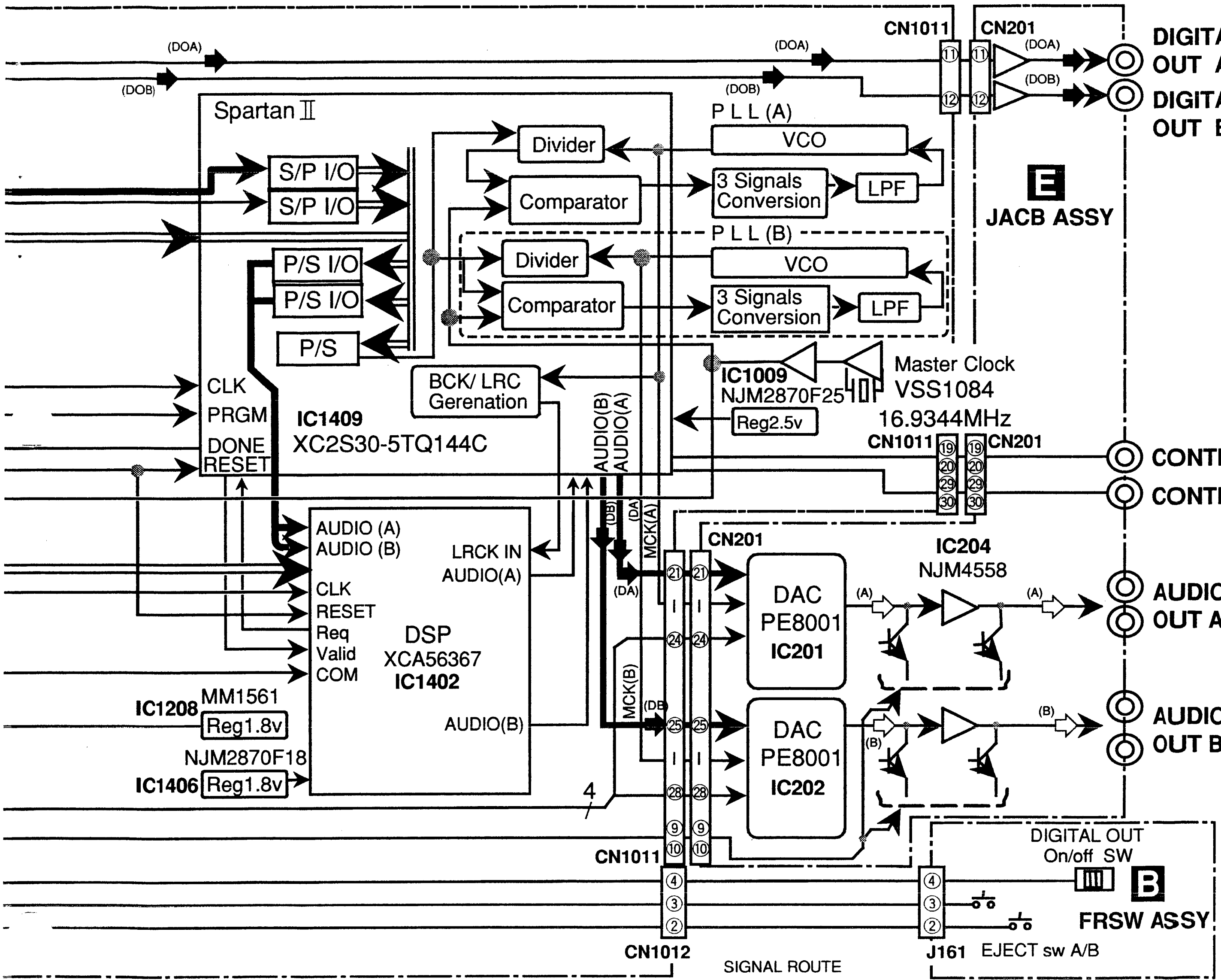
● REMOTE CONTROLLER (CU-V163) PARTS LIST

Mark	No.	Description	Part No.
	1	CNTA ASSY	DWG1551
	2	CNTB ASSY	DWG1552
	3	CNNB ASSY	DWG1553
	4	PHTA ASSY	DWG1554
	5	PHTB ASSY	DWG1555
	6	Screw	ABA7022
	7	CR Spacer	DEB1524
	8	Jog Sheet A	DEC2468
	9	Slide VR Packing	DED1157
	10	J Magnet	DMG1006
	11	Rear Panel	DNC1590
	12	Magnet Stay	DNF1668
	13	Earth Plate	DNH2506
	14	Retainer	DNK3952
	15	Panel Base	DNK3953
	16	Jog Ring	DNK3954
	17	Screw (Steel)	PBA1096
	18	Foot (Rubber)	REC1263
	19	Steel Ball	VNX1006
	20	Select Knob 1	DEB1504
	21	Select Knob 2	DEB1505
	22	Control Panel	DNB1099
	23	Jog Dial	DNK3950
	24	Display Plate	DNK3951
	25	Slide Knob	DNK3955
	26	65 Label	ARW7050
	27	Screw	BBZ30P060FMC
	28	Screw	BPZ30P080FZK
	29	Screw	CBZ30P080FZK
	30	Washer	WH30FUC

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

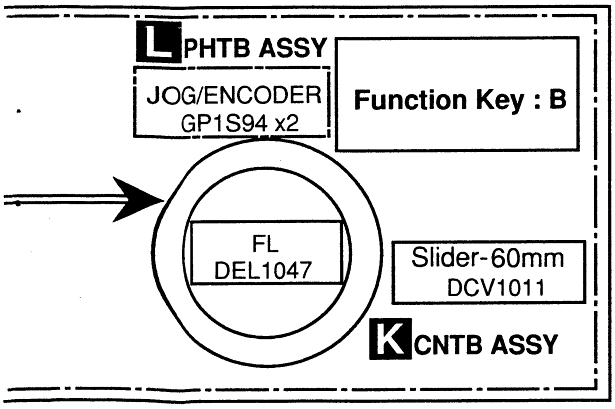
3.1 BLOCK DIAGRAM


Slot Mecha (A)
Slot mecha A
C SLM1 ASSY
OP/CL POSITION SW
Lod M
INSIDE SW
sled M
Spdl M
PU
Slot mecha B
A MAIN ASSY
(DOA)
(DOB)
CN801
PL(A) Servo Circuit
LOAD SW
J4
CN2
INSIDE
CN1
BTL driver
IC1011
LA6562
Servo processor
IC1005
TC9495F
MCK
Head AMP
IC1010
TA2153FN
SBOK
SUBQ
SBSY
SFSY
toFPGA
PL(B) Servo Circuit
FLASH ROM(8M)
IC1200
DYW1701
SDRAM(128M)
IC1408
K4S281632C
RESET
IC1022
M51957
16
48.0MHz
DSS1132 12.0MHz
Lod_Sw
INSD
LOD(A)
COM(A)
Lod_Sw
INSD
LOD(B)
COM(B)
4
4
CLK
PRGM
DONE
RESET
COM
SET
MUTE
IC1204
Micro Computer
Communication I/F
Sw: RSA1001
F PWRB ASSY
AC Power Cord
① V+11B
② V+5D
③ GNDD
④ V+7A
⑤ GNDD
⑥ V+8B
⑦ VLOD
⑧ FLAC1
⑨ FLAC2
CN105
Connector pin name
① GNDD
② GNDD
③ RXD
④ V+8B
⑤ FLAC1
⑥ TXD
⑦ VLOD
⑧ FLAC2
JA701
JA207
(MINIDIN8P)
Remoto Controller Section
M CNNB ASSY
Communication I/F
J PHTA ASSY
Function Key : A
JOG/ENCODER
GP1S94 x2
FL
DEL1047
Slider-60mm
DCV1011
Control IC
IC301
DSS1131
4MHz
Control IC
IC501
PD5764A
DSS1131
4MHz
I CNTA ASSY

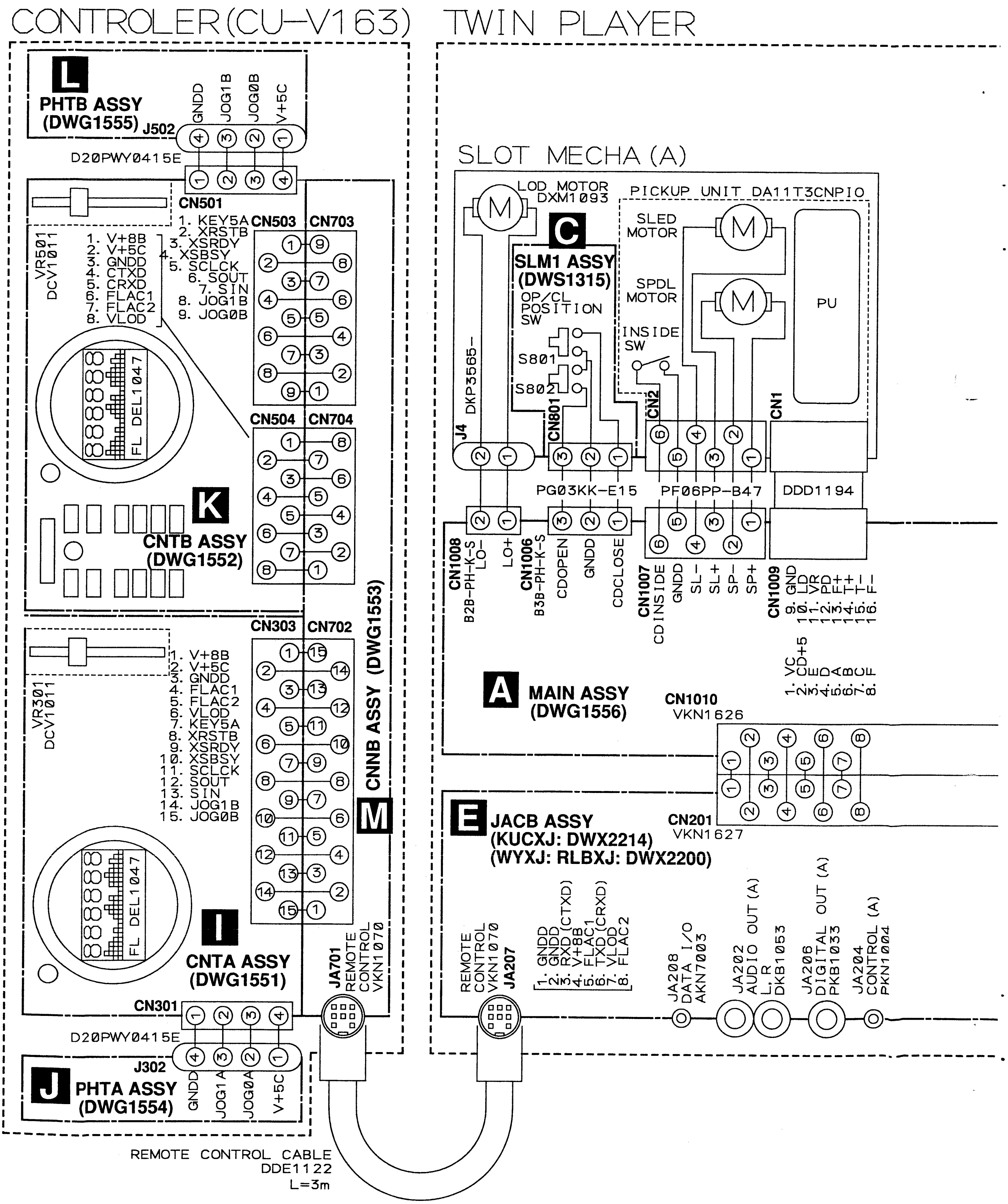

(DOA)
(DOB)
CN1011
CN201
⑪
⑫
DIGITAL OUT A
DIGITAL OUT B
Spartan Ⅱ
S/P I/O
S/P I/O
P/S I/O
P/S I/O
P/S
Divider
Comparator
PLL (A)
VCO
3 Signals Conversion
LPF
PLL (B)
Divider
Comparator
VCO
3 Signals Conversion
LPF
E
JACB ASSY
BCK/ LRC Gerenation
IC1009
NJM2870F25
Master Clock
VSS1084
16.9344MHz
Reg2.5v
CLK
PRGM
DONE
RESET
IC1409
XC2S30-5TQ144C
AUDIO(B)
AUDIO(A)
CN1011
⑲
⑳
㉙
㉚
CN201
CONTROL A
CONTROL B
AUDIO (A)
AUDIO (B)
LRCK IN
AUDIO(A)
CLK
RESET
Req
Valid
COM
DSP
XCA56367
IC1402
AUDIO(B)
IC1208
MM1561
Reg1.8v
NJM2870F18
IC1406
Reg1.8v
(DB)
(DA)
MCK(A)
MCK(B)
4
CN201
㉑
㉔
㉕
㉘
⑨
⑩
CN1011
DAC
PE8001
IC201
DAC
PE8001
IC202
IC204
NJM4558
(A)
(B)
AUDIO OUT A
AUDIO OUT B
DIGITAL OUT On/off SW
B
FRSW ASSY
④
③
②
CN1012
J161
EJECT sw A/B

SIGNAL ROUTE

- (A) ⇨ : PB A AUDIO SIGNAL
- (B) ⇨ : PB B AUDIO SIGNAL
- (DA) ➡ : DIGITAL DATA A SIGNAL
- (DB) ➡ : DIGITAL DATA B SIGNAL
- (DOA) ➡ : DIGITAL AUDIO A SIGNAL
- (DOB) ➡ : DIGITAL AUDIO B SIGNAL


L PHTB ASSY
JOG/ENCODER
GP1S94 x2
Function Key : B
FL
DEL1047
Slider-60mm
DCV1011
K CNTB ASSY

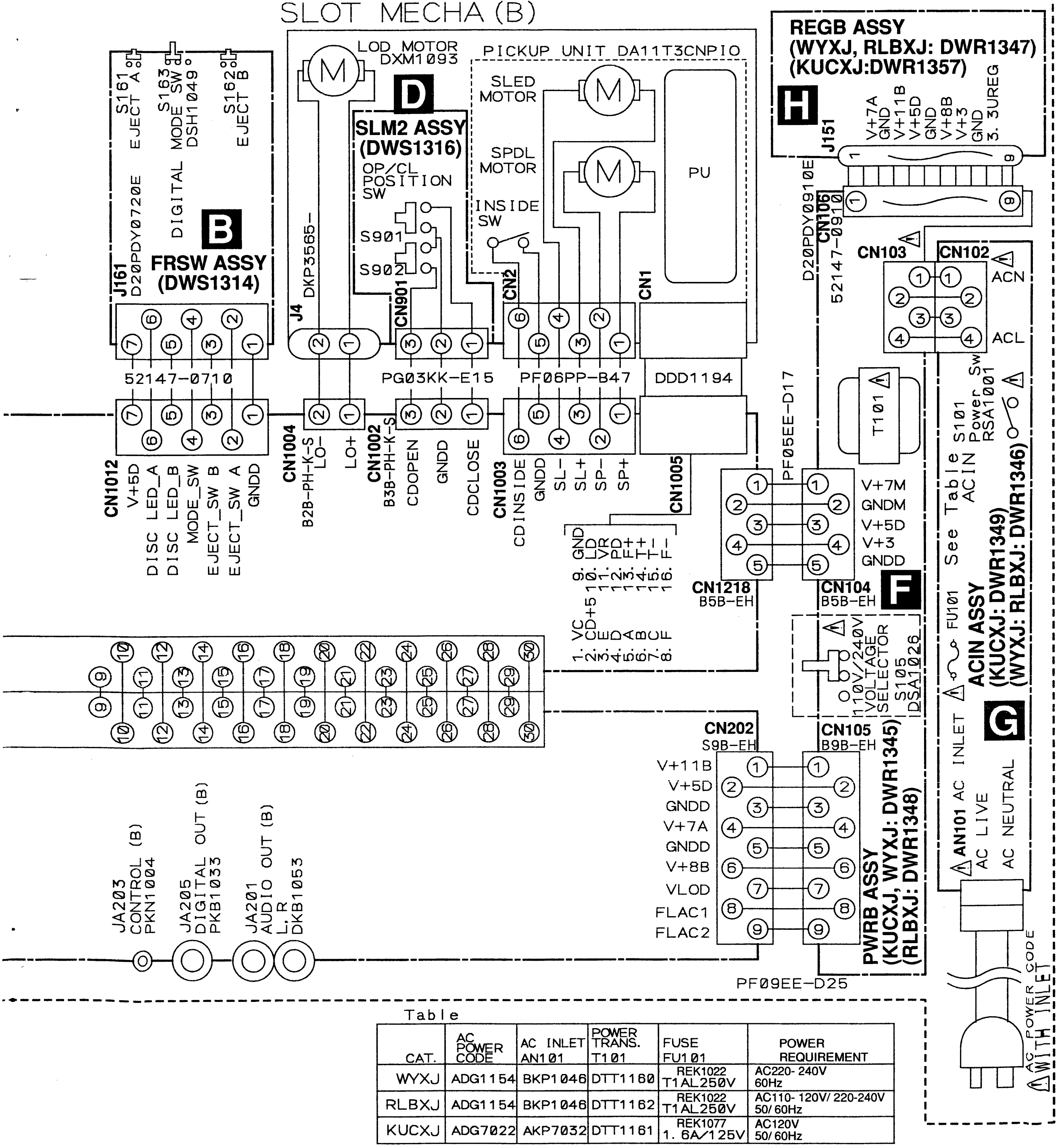
3.2 OVERALL WIRING DIAGRAM


CONTROLER(CU-V163)
TWIN PLAYER
L
PHTB ASSY
(DWG1555)
J502
GNDD
JOG1B
JOG0B
V+5C
D20PWY0415E
CN501
1. KEY5A
2. XRSTB
3. XSRDY
4. XSBSY
5. SCLCK
6. SOUT
7. SIN
8. JOG1B
9. JOG0B
CN503
CN703
VR501
DCV1011
1. V+8B
2. V+5C
3. GNDD
4. CTXD
5. CRXD
6. FLAC1
7. FLAC2
8. VLOD
FL DEL1047
CN504
CN704
K
CNTB ASSY
(DWG1552)
CN303
CN702
CNNB ASSY (DWG1553)
M
VR301
DCV1011
1. V+8B
2. V+5C
3. GNDD
4. FLAC1
5. FLAC2
6. VLOD
7. KEY5A
8. XRSTB
9. XSRDY
10. XSBSY
11. SCLCK
12. SOUT
13. SIN
14. JOG1B
15. JOG0B
FL DEL1047
I
CNTA ASSY
(DWG1551)
CN301
D20PWY0415E
J302
J
PHTA ASSY
(DWG1554)
GNDD
JOG1A
JOG0A
V+5C
JA701
REMOTE CONTROL
VKN1070
REMOTE CONTROL CABLE
DDE1122
L=3m
SLOT MECHA (A)
LOD MOTOR
DXM1093
PICKUP UNIT DA11T3CNPIO
C
SLM1 ASSY
(DWS1315)
OP/CL POSITION SW
S801
S802
SLED MOTOR
SPDL MOTOR
INSIDE SW
PU
DKP3565-
J4
CN801
CN2
CN1
PG03KK-E15
PF06PP-B47
DDD1194
CN1008
B2B-PH-K-S
LO-
LO+
CN1006
B3B-PH-K-S
CDOPEN
GNDD
CDCLOSE
CN1007
CDINSIDE
GNDD
SL-
SL+
SP-
SP+
CN1009
9. GND
10. LD
11. VR
12. PD
13. F+
14. T+
15. T-
16. F-
1. VC
2. CD+5
3. E
4. D
5. A
6. B
7. C
8. F
A
MAIN ASSY
(DWG1556)
CN1010
VKN1626
E
JACB ASSY
(KUCXJ: DWX2214)
(WYXJ: RLBXJ: DWX2200)
CN201
VKN1627
REMOTE CONTROL
VKN1070
JA207
1. GNDD
2. GNDD
3. RXD (CTXD)
4. V+8B
5. FLAC1
6. TXD (CRXD)
7. VLOD
8. FLAC2
JA208
DATA I/O
AKN7003
JA202
AUDIO OUT (A)
L, R
DKB1053
JA206
DIGITAL OUT (A)
PKB1033
JA204
CONTROL (A)
PKN1004

Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".

THE ⚠ MARK FOUND ON SAVE COMPONENT PARTS INDICATES THE IMPORTANCE OF THE SAFETY FACTOR OF THE PARTS. THERFORE, WHEN REPLACING, BE SURE TO USE PARTS OF IDENTICAL DESIGNATION.

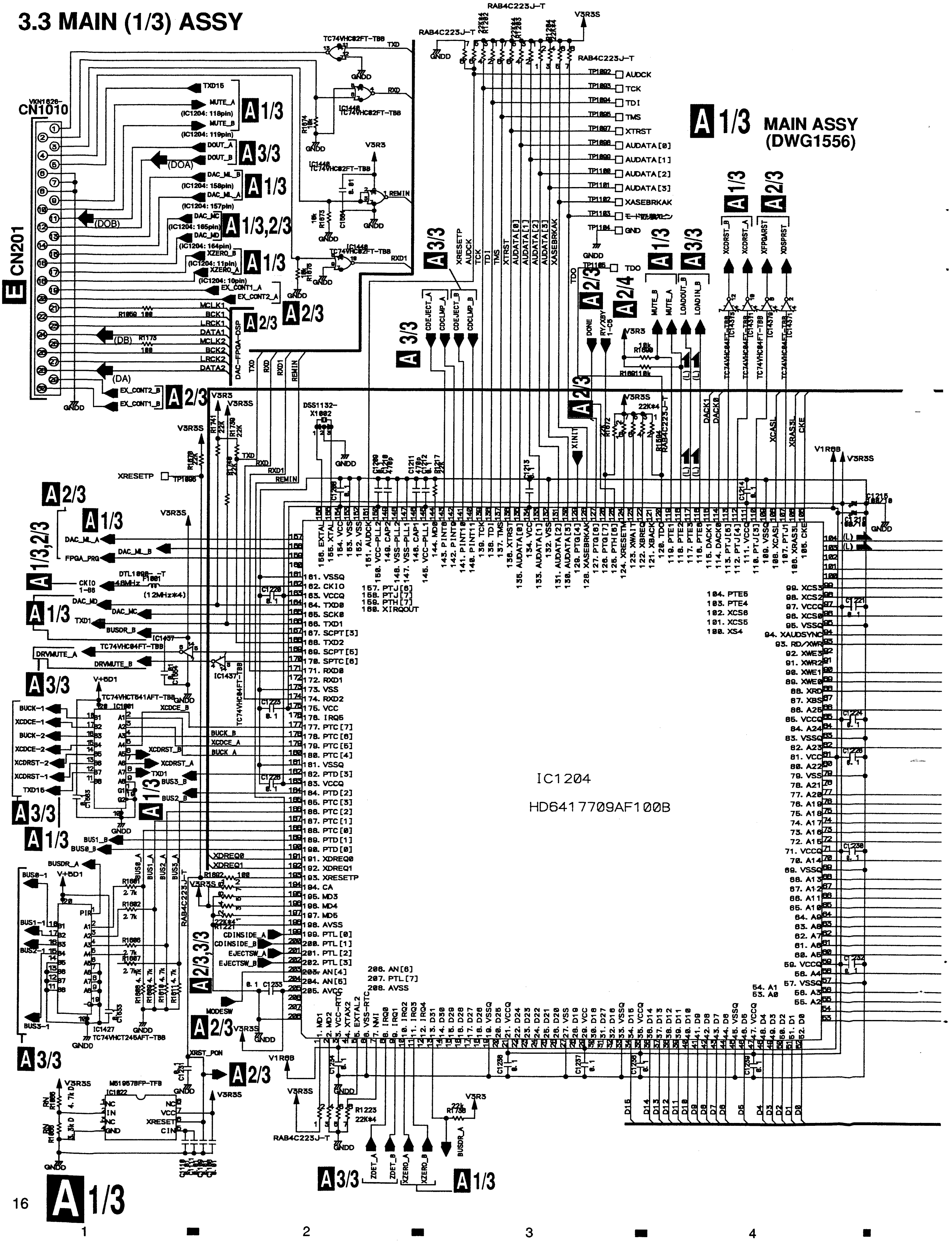
CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS ONLY.

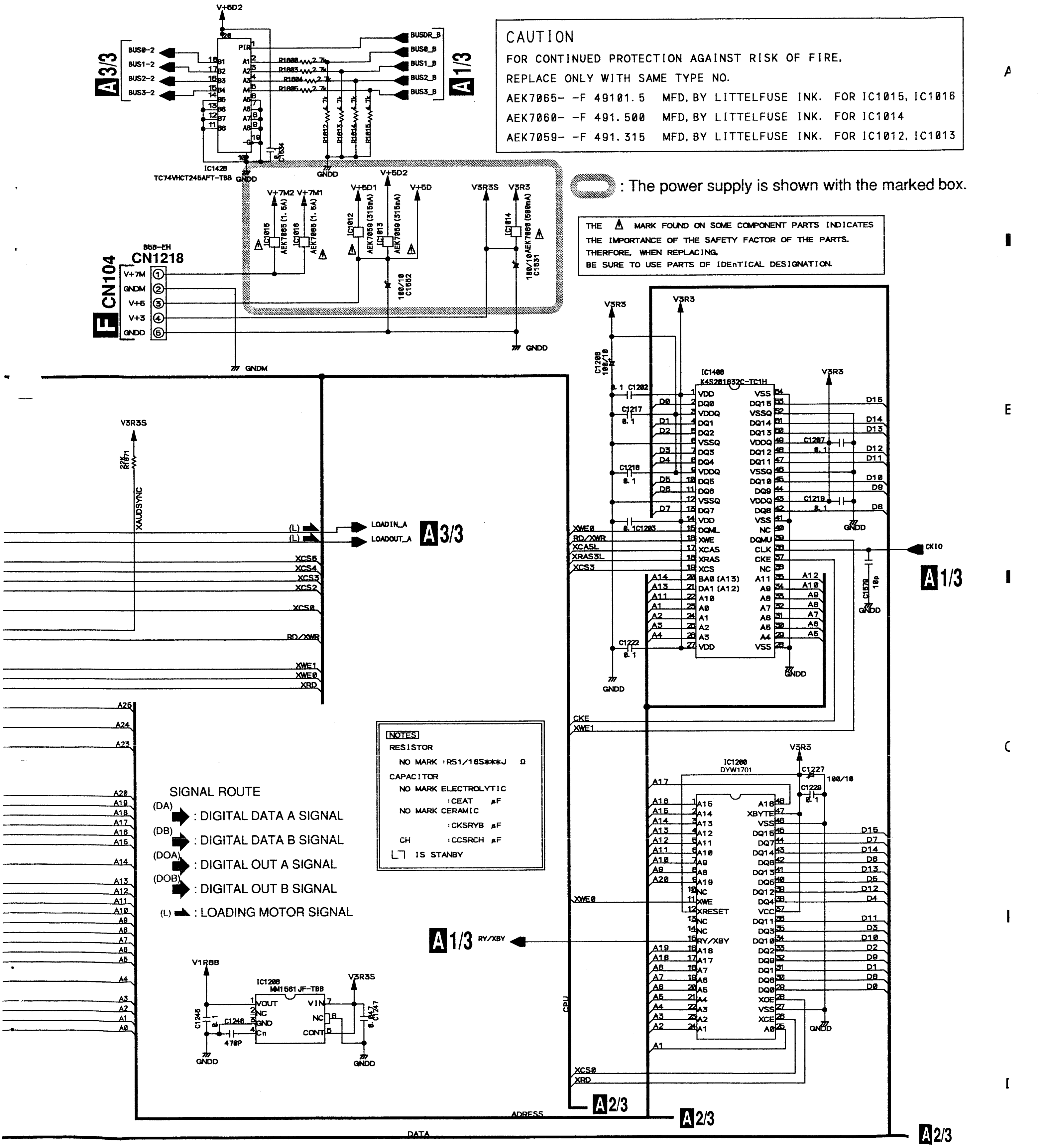

SLOT MECHA (B)
LOD MOTOR DXM1093
PICKUP UNIT DA11T3CNPIO
SLED MOTOR
SPDL MOTOR
INSIDE SW
PU
D
SLM2 ASSY (DWS1316)
OP/CL POSITION SW
S901
S902
CN901
CN2
CN1
J4
DKP3565-
B
FRSW ASSY (DWS1314)
J161 D20PDY0720E
S161 EJECT A
S163 DIGITAL MODE SW DSH1049
S162 EJECT B
52147-0710
PG03KK-E15
PF06PP-B47
DDD1194
CN1012
V+5D
DISC LED_A
DISC LED_B
MODE_SW
EJECT_SW B
EJECT_SW A
GNDD
CN1004 B2B-PH-K-S
LO-
LO+
CN1002 B3B-PH-K-S
CDOPEN
GNDD
CDCLOSE
CN1003
CDINSIDE
GNDD
SL-
SL+
SP-
SP+
CN1005
1. VC
2. CD+5
3. E
4. D
5. A
6. B
7. C
8. F
9. GND
10. LD
11. VR
12. PD
13. F+
14. T+
15. T-
16. F-
H
REGB ASSY (WYXJ, RLBXJ: DWR1347) (KUCXJ:DWR1357)
J151
V+7A
GND
V+11B
V+5D
GND
V+8B
V+3
GND
3. 3UREG
CN106 D20PDY0910E
52147-0910
CN103
CN102
ACN
ACL
T101
PF05EE-D17
V+7M
GNDM
V+5D
V+3
GNDD
CN1218 B5B-EH
CN104 B5B-EH
F
110V/240V VOLTAGE SELECTOR S105 DSA1026
CN202 S9B-EH
CN105 B9B-EH
V+11B
V+5D
GNDD
V+7A
GNDD
V+8B
VLOD
FLAC1
FLAC2
PF09EE-D25
PWRB ASSY (KUCXJ, WYXJ: DWR1345) (RLBXJ: DWR1348)
G
ACIN ASSY (KUCXJ: DWR1349) (WYXJ: RLBXJ: DWR1346)
S101 Power Sw RSA1001
FU101 See Table ACIN
AN101 AC INLET
AC LIVE
AC NEUTRAL
AC POWER CODE WITH INLET
JA203 CONTROL (B) PKN1004
JA205 DIGITAL OUT (B) PKB1033
JA201 AUDIO OUT (B) L,R DKB1053

Table

CAT.	AC POWER CODE	AC INLET AN101	POWER TRANS. T101	FUSE FU101	POWER REQUIREMENT
WYXJ	ADG1154	BKP1046	DTT1160	REK1022 T1AL250V	AC220- 240V 60Hz
RLBXJ	ADG1154	BKP1046	DTT1162	REK1022 T1AL250V	AC110- 120V/ 220-240V 50/ 60Hz
KUCXJ	ADG7022	AKP7032	DTT1161	REK1077 1. 6A/125V	AC120V 50/ 60Hz

3.3 MAIN (1/3) ASSY


A 1/3 MAIN ASSY
(DWG1556)
E CN201
VKN1626-
CN1010
TXD15
MUTE_A
(IC1204: 118pin)
MUTE_B
(IC1204: 119pin)
DOUT_A
DOUT_B
(DOA)
DAC_ML_B
(IC1204: 158pin)
DAC_ML_A
(IC1204: 157pin)
(DOB)
DAC_MC
(IC1204: 165pin)
DAC_MD
(IC1204: 164pin)
XZERO_B
(IC1204: 11pin)
XZERO_A
(IC1204: 10pin)
EX_CONT1_A
EX_CONT2_A
MCLK1
BCK1
LRCK1
DATA1
MCLK2
BCK2
LRCK2
DATA2
(DB)
(DA)
EX_CONT2_B
EX_CONT1_B
DAC-FPGA-DSP
TC74VHC02FT-TBB
IC1448
TXD
RXD
RXD1
REMIN
V3R3
V3R3S
GNDD
RAB4C223J-T
TP1092 AUDCK
TP1093 TCK
TP1094 TDI
TP1095 TMS
TP1097 XTRST
TP1098 AUDATA[0]
TP1099 AUDATA[1]
TP1100 AUDATA[2]
TP1101 AUDATA[3]
TP1102 XASEBRKAK
TP1103
TP1104 GND
TP1105 TDO
XRESETP
CDEJECT_A
CDCLMP_A
CDEJECT_B
CDCLMP_B
DONE
RY/XBY 1-C5
MUTE_B
MUTE_A
LOADOUT_B
LOADIN_B
XCDRST_B
XCDRST_A
XFPGARST
XDSPRST
TC74VHC04FT-TBB
IC1431
IC1437
XINIT
DACK1
DACK0
XCASL
XRAS3L
CKE
DSS1132-
X1002
V1R8B
DTL1008-T
48MHz
(12MHz×4)
CKIO
DAC_ML_A
FPGA_PRG
DAC_ML_B
DAC_MD
DAC_MC
TXD1
BUSDR_B
DRVMUTE_A
DRVMUTE_B
V+5D1
TC74VHCT541AFT-TBB
IC1001
BUCK-1
XCDCE-1
BUCK-2
XCDCE-2
XCDRST-2
XCDRST-1
XCDCE_B
BUCK_B
XCDCE_A
BUCK_A
XCDRST_B
XCDRST_A
BUS3_B
BUS2_B
BUS1_B
BUS0_B
BUSDR_A
BUS0-1
BUS1-1
BUS2-1
BUS3-1
BUS0_A
BUS1_A
BUS2_A
BUS3_A
IC1427
TC74VHCT245AFT-TBB
XDREQ0
XDREQ1
CDINSIDE_A
CDINSIDE_B
EJECTSW_A
EJECTSW_B
MODESW
XRST_PON
M51957BFP-TFB
IC1022
NC
IN
GND
VCC
XRESET
CIN
ZDET_A
ZDET_B
XZERO_A
XZERO_B
BUSDR_A
IC1204
HD6417709AF100B
156. EXTAL
155. XTAL
154. VCC
153. VSS
152. VSS
151. AUDCK
150. VCC-PLL2
149. CAP2
148. VSS-PLL2
147. VSS-PLL1
146. CAP1
145. VCC-PLL1
144. MD0
143. PINT0
142. PINT10
141. PINT11
140. PINT11
139. TCK
138. TDI
137. TMS
136. XTRST
135. AUDATA[0]
134. VCC
133. AUDATA[1]
132. VSS
131. AUDATA[2]
130. AUDATA[3]
129. PTG[4]
128. XASEBRKAK
127. PTG[6]
126. PTG[7]
125. PTG[5]
124. XRESETM
123. XWAIT
122. XBREQ
121. XBACK
120. TDO
119. PTE1
118. PTE2
117. PTE3
116. PTE6
115. DACK1
114. DACK0
113. PTJ[5]
112. PTJ[4]
111. VCCQ
110. PTJ[3]
109. VSSQ
108. XCASL
107. PTJ1
106. XRAS3L
105. CKE
157. PTJ[6]
158. PTJ[7]
159. PTH[7]
160. XIRQOUT
161. VSSQ
162. CKIO
163. VCCQ
164. TXD0
165. SCK0
166. TXD1
167. SCPT[3]
168. TXD2
169. SCPT[5]
170. SPTC[6]
171. RXD0
172. RXD1
173. VSS
174. RXD2
175. VCC
176. IRQ5
177. PTC[7]
178. PTC[6]
179. PTC[5]
180. PTC[4]
181. VSSQ
182. PTD[3]
183. VCCQ
184. PTD[2]
185. PTC[3]
186. PTC[2]
187. PTC[1]
188. PTC[0]
189. PTD[1]
190. PTD[0]
191. XDREQ0
192. XDREQ1
193. XRESETP
194. CA
195. MD3
196. MD4
197. MD5
198. AVSS
199. PTL[0]
200. PTL[1]
201. PTL[2]
202. PTL[3]
203. AN[4]
204. AN[5]
205. AVCC
206. AN[6]
207. PTL[7]
208. AVSS
104. PTE5
103. PTE4
102. XCS6
101. XCS5
100. XS4
99. XCS3
98. XCS2
97. VCCQ
96. XCS0
95. VSSQ
94. XAUDSYNC
93. RD/XWR
92. XWE3
91. XWR2
90. XWE1
89. XWE0
88. XRD
87. XBS
86. A25
85. VCCQ
84. A24
83. VSSQ
82. A23
81. VCC
80. A22
79. VSS
78. A21
77. A20
76. A19
75. A18
74. A17
73. A16
72. A15
71. VCCQ
70. A14
69. VSSQ
68. A13
67. A12
66. A11
65. A10
64. A9
63. A8
62. A7
61. A6
60. A5
59. VCCQ
58. A4
57. VSSQ
56. A3
55. A2
54. A1
53. A0
1. MD1
2. MD2
3. VCC-RTC
4. XTAX2
5. EXTAL2
6. VSS-RTC
7. NMI
8. IRQ0
9. IRQ1
10. IRQ3
11. IRQ4
12. IRQ4
13. D31
14. D30
15. D29
16. D28
17. D27
18. D26
19. VSSQ
20. D25
21. VCCQ
22. D24
23. D23
24. D22
25. D21
26. D20
27. VSS
28. D19
29. VCC
30. D18
31. D17
32. D16
33. VSSQ
34. D15
35. VCCQ
36. D14
37. D13
38. D12
39. D11
40. D10
41. D9
42. D8
43. D7
44. D6
45. VSSQ
46. D5
47. VCCQ
48. D4
49. D3
50. D2
51. D1
52. D0
D15 D14 D13 D12 D11 D10 D9 D8 D7 D6 D5 D4 D3 D2 D1 D0
R1223 22K×4
R1730 22k
A 1/3
A 2/3
A 3/3
A 2/4
A 1/3,2/3
A 2/3,3/3


V+5D2
BUS0-2
BUS1-2
BUS2-2
BUS3-2
A 3/3
PIR
A1
A2
A3
A4
A5
A6
A7
A8
B1
B2
B3
B4
B5
B6
B7
B8
R1600 2.7k
R1603 2.7k
R1604 2.7k
R1605 2.7k
R1612 4.7k
R1613 4.7k
R1614 4.7k
R1615 4.7k
BUSDR_B
BUS0_B
BUS1_B
BUS2_B
BUS3_B
A 1/3
C1634 0.1
IC1420
TC74VHCT245AFT-TBB
GNDD
V+7M2
V+7M1
V+5D1
V+5D
V3R3S
V3R3
IC1015 AEK7065 (1.5A)
IC1016 AEK7065 (1.5A)
IC1012 AEK7059 (315mA)
IC1013 AEK7059 (315mA)
IC1014 AEK7060 (500mA)
100/10 C1562
100/10 C1531
B5B-EH
CN1218
CN104
F
V+7M
GNDM
V+5
V+3
GNDD
GNDM
V3R3S
22K R1671
XAUDSYNC
(L)
LOADIN_A
LOADOUT_A
A 3/3
XCS5
XCS4
XCS3
XCS2
XCS0
RD/XWR
XWE1
XWE0
XRD
A25
A24
A23
A20
A19
A18
A17
A16
A15
A14
A13
A12
A11
A10
A9
A8
A7
A6
A5
A4
A3
A2
A1
A0
V1R8B
IC1208
MM1561JF-TBB
VOUT
NC
GND
Cn
VIN
NC
CONT
C1245 0.1
C1246 470P
C1247 0.047
V3R3S
GNDD
A 1/3 RY/XBY
CPU
ADRESS
DATA
A 2/3
V3R3
C1208 100/10
C1202 0.1
C1217 0.1
C1218 0.1
C1203 0.1
C1222 0.1
IC1400
K4S281632C-TC1H
VDD
DQ0
VDDQ
DQ1
DQ2
VSSQ
DQ3
DQ4
VDDQ
DQ5
DQ6
VSSQ
DQ7
VDD
DQML
XWE
XCAS
XRAS
XCS
BA0 (A13)
DA1 (A12)
A10
A0
A1
A2
A3
VDD
VSS
DQ15
VSSQ
DQ14
DQ13
VDDQ
DQ12
DQ11
VSSQ
DQ10
DQ9
VDDQ
DQ8
VSS
NC
DQMU
CLK
CKE
NC
A11
A9
A8
A7
A6
A5
A4
VSS
C1207 0.1
C1219 0.1
D0 D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D15
XWE0
RD/XWR
XCASL
XRAS3L
XCS3
CKIO
C1570 10p
A 1/3
CKE
XWE1
V3R3
IC1200
DYW1701
C1227 100/10
C1229 0.1
A15
A14
A13
A12
A11
A10
A9
A8
A19
NC
XWE
XRESET
NC
NC
RY/XBY
A18
A17
A7
A6
A5
A4
A3
A2
A1
A16
XBYTE
VSS
DQ15
DQ7
DQ14
DQ6
DQ13
DQ5
DQ12
DQ4
VCC
DQ11
DQ3
DQ10
DQ2
DQ9
DQ1
DQ8
DQ0
XOE
VSS
XCE
A0
XCS0
XRD
GNDD

CAUTION

FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE NO.

AEK7065- -F 49101.5	MFD, BY LITTELFUSE INK.	FOR IC1015, IC1016
AEK7060- -F 491.500	MFD, BY LITTELFUSE INK.	FOR IC1014
AEK7059- -F 491.315	MFD, BY LITTELFUSE INK.	FOR IC1012, IC1013

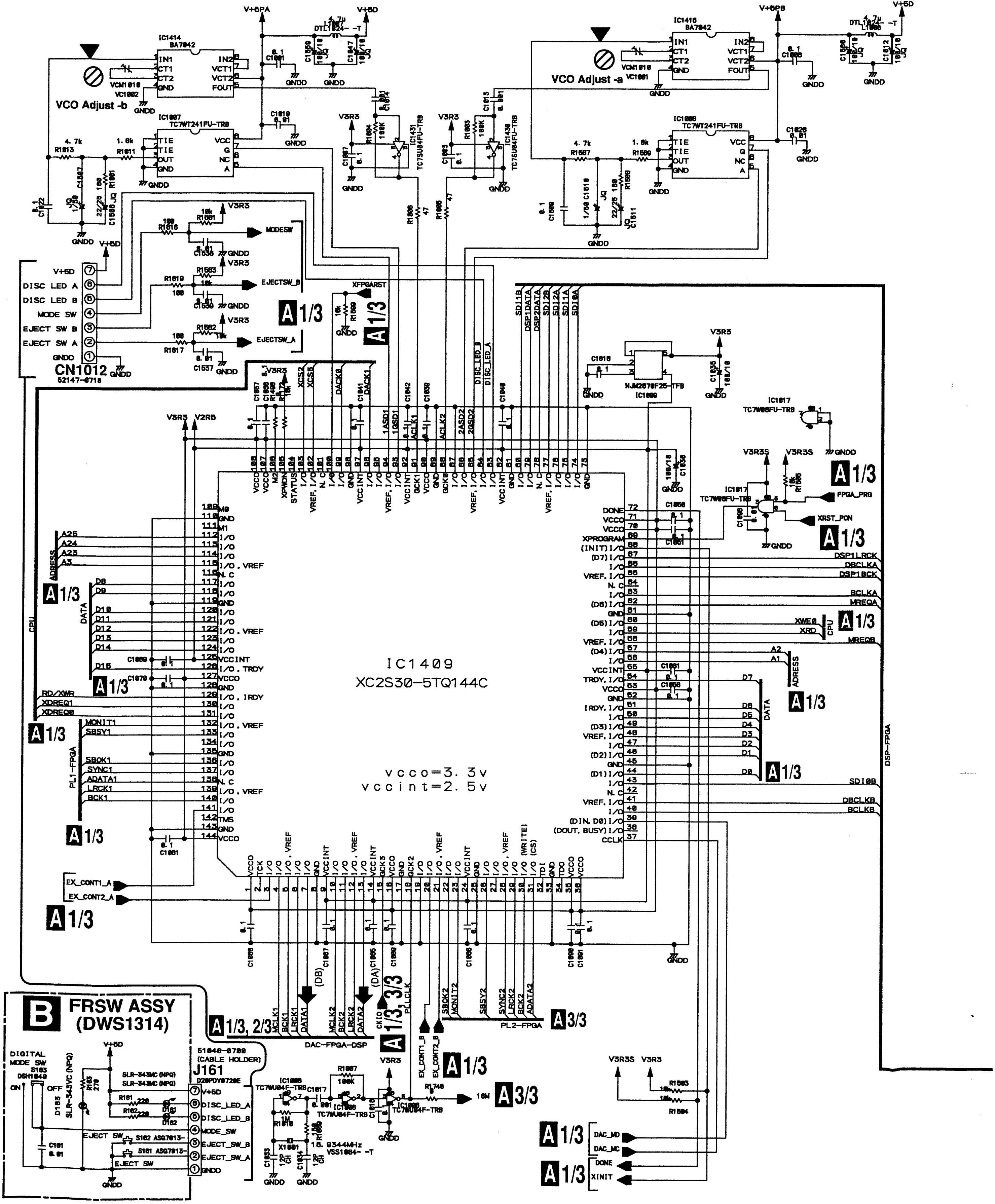
▭ : The power supply is shown with the marked box.

THE ⚠ MARK FOUND ON SOME COMPONENT PARTS INDICATES THE IMPORTANCE OF THE SAFETY FACTOR OF THE PARTS. THERFORE, WHEN REPLACING, BE SURE TO USE PARTS OF IDEnTICAL DESIGNATION.

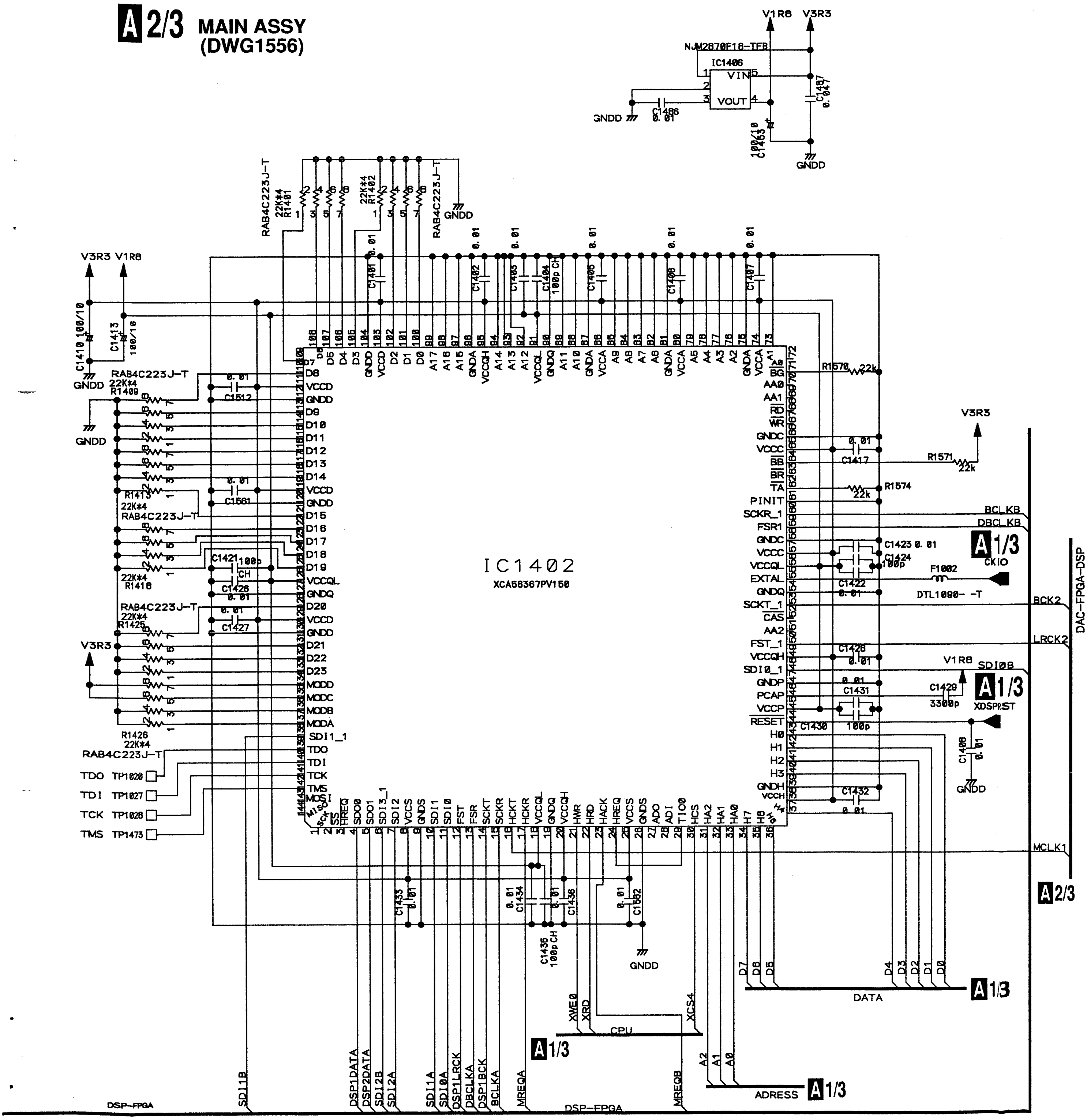
NOTES
RESISTOR
NO MARK :RS1/16S***J Ω
CAPACITOR
NO MARK ELECTROLYTIC
:CEAT μF
NO MARK CERAMIC
:CKSRYB μF
CH :CCSRCH μF
└┐ IS STANBY

SIGNAL ROUTE
(DA) ➡ : DIGITAL DATA A SIGNAL
(DB) ➡ : DIGITAL DATA B SIGNAL
(DOA) ➡ : DIGITAL OUT A SIGNAL
(DOB) ➡ : DIGITAL OUT B SIGNAL
(L) ➡ : LOADING MOTOR SIGNAL

3.4 MAIN (2/3) and FRSW ASSYS


IC1414
BA7042
VCO Adjust -b
IC1415
BA7042
VCO Adjust -a
IC1607
TC7WT241FU-TRB
IC1608
TC7WT241FU-TRB
IC1431
TC7SU04FU-TRB
IC1430
TC7SU04FU-TRB
V+5PA
V+5PB
V+5D
V3R3
GNDD
MODESW
EJECTSW_B
EJECTSW_A
XFPGARST
V+5D
DISC LED A
DISC LED B
MODE SW
EJECT SW B
EJECT SW A
GNDD
CN1012
52147-0710
A 1/3
IC1409
XC2S30-5TQ144C
vcco=3.3v
vccint=2.5v
NJM2870F25-TFB
IC1609
IC1617
TC7W66FU-TRB
FPGA_PRG
XRST_PON
ADRESS
DATA
CPU
PL1-FPGA
MONIT1
SBSY1
SBOK1
SYNC1
ADATA1
LRCK1
BCK1
RD/XWR
XDREQ1
XDREQ0
DSP1LRCK
DBCLKA
DSP1BCK
BCLKA
MREQA
XWE0
XRD
MREQB
SDI0B
DBCLKB
BCLKB
DSP-FPGA
EX_CONT1_A
EX_CONT2_A
A 1/3, 2/3
DAC-FPGA-DSP
MCLK1
BCK1
LRCK1
DATA1
MCLK2
LRCK2
BCK2
DATA2
(DB)
(DA)
A 3/3
PL2-FPGA
SBOK2
MONIT2
SBSY2
SYNC2
LRCK2
BCK2
ADATA2
EX_CONT1_B
EX_CONT2_B
16M
IC1606
TC7WU04F-TRB
X1601
16.9344MHz
VSS1064- -T
V3R3S
DAC_MD
DAC_MC
DONE
XINIT
B
FRSW ASSY
(DWS1314)
DIGITAL MODE SW
S163
DSH1049
ON
OFF
D163
SLR-343VC (NPQ)
SLR-343MC (NPQ)
D161
D162
EJECT SW
S162 ASG7013-
S161 ASG7013-
J161
51048-0700
(CABLE HOLDER)
D20PDY0720E
V+5D
DISC_LED_A
DISC_LED_B
MODE_SW
EJECT_SW_B
EJECT_SW_A
GNDD

A 2/3 MAIN ASSY (DWG1556)


IC1402
XCA56367PV150
IC1406
NJM2870F18-TEB
VIN
VOUT
V1R8
V3R3
GNDD
C1486 0.01
C1487 0.047
C1463 100/10
C1410 100/10
C1413 100/10
RAB4C223J-T
22K*4
R1401
R1402
R1409
R1413
R1418
R1425
R1426
C1401
C1402
C1403
C1404 100p CH
C1405
C1406
C1407
C1512
C1561
C1421 100p CH
C1426
C1427
C1417
C1423 0.01
C1424 100p
C1422 0.01
C1428 0.01
C1431
C1429 3300p
C1430 100p
C1408 0.01
C1432 0.01
C1433 0.01
C1434 0.01
C1435 100p CH
C1436 0.01
C1562 0.01
R1570 22k
R1571 22k
R1574 22k
F1002
DTL1000- -T
CKIO
XDSPRST
A 1/3
A 2/3
TDO TP1020
TDI TP1027
TCK TP1028
TMS TP1473
BCLKB
DBCLKB
BCK2
LRCK2
SDI0B
MCLK1
DAC-FPGA-DSP
DATA
CPU
ADRESS
XWE0
XRD
XCS4
A2
A1
A0
D7
D6
D5
D4
D3
D2
D1
D0
SDI1B
DSP1DATA
DSP2DATA
SDI2B
SDI2A
SDI1A
SDI0A
DSP1LRCK
DBCLKA
DSP1BCK
BCLKA
MREQA
MREQB
DSP-FPGA

SIGNAL ROUTE

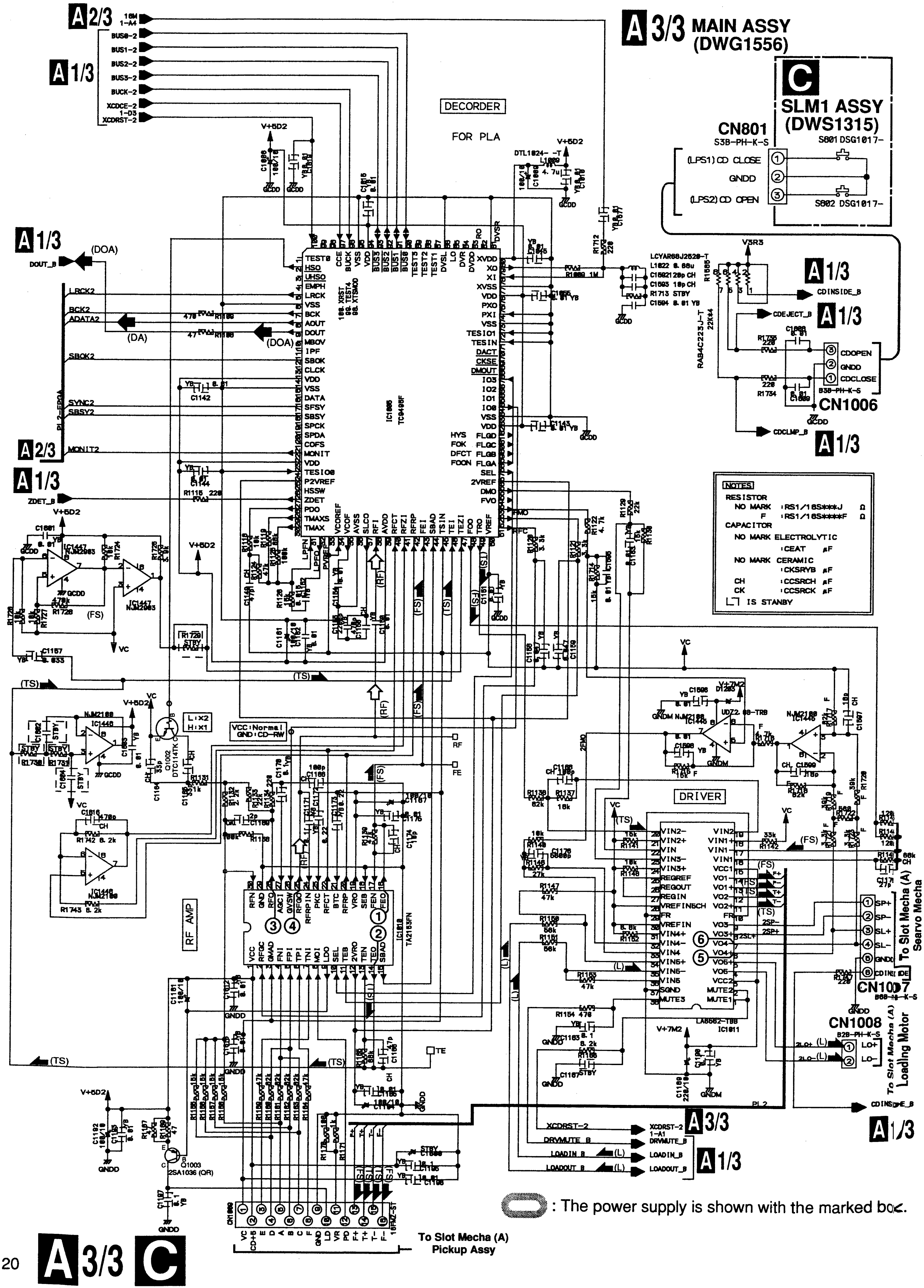
(DA) ➡ : DIGITAL DATA A SIGNAL

(DB) ➡ : DIGITAL DATA B SIGNAL

NOTES

RESISTOR
NO MARK : RS1/16S***J Ω
RN : RN1/16SE****D Ω
CAPACITOR
NO MARK ELECTROLYTIC
: CEAT μF
JQ : CEJQ μF
NO MARK CERAMIC
: CKSRYB μF
CH : CCSRCH μF
⌐ IS STANBY

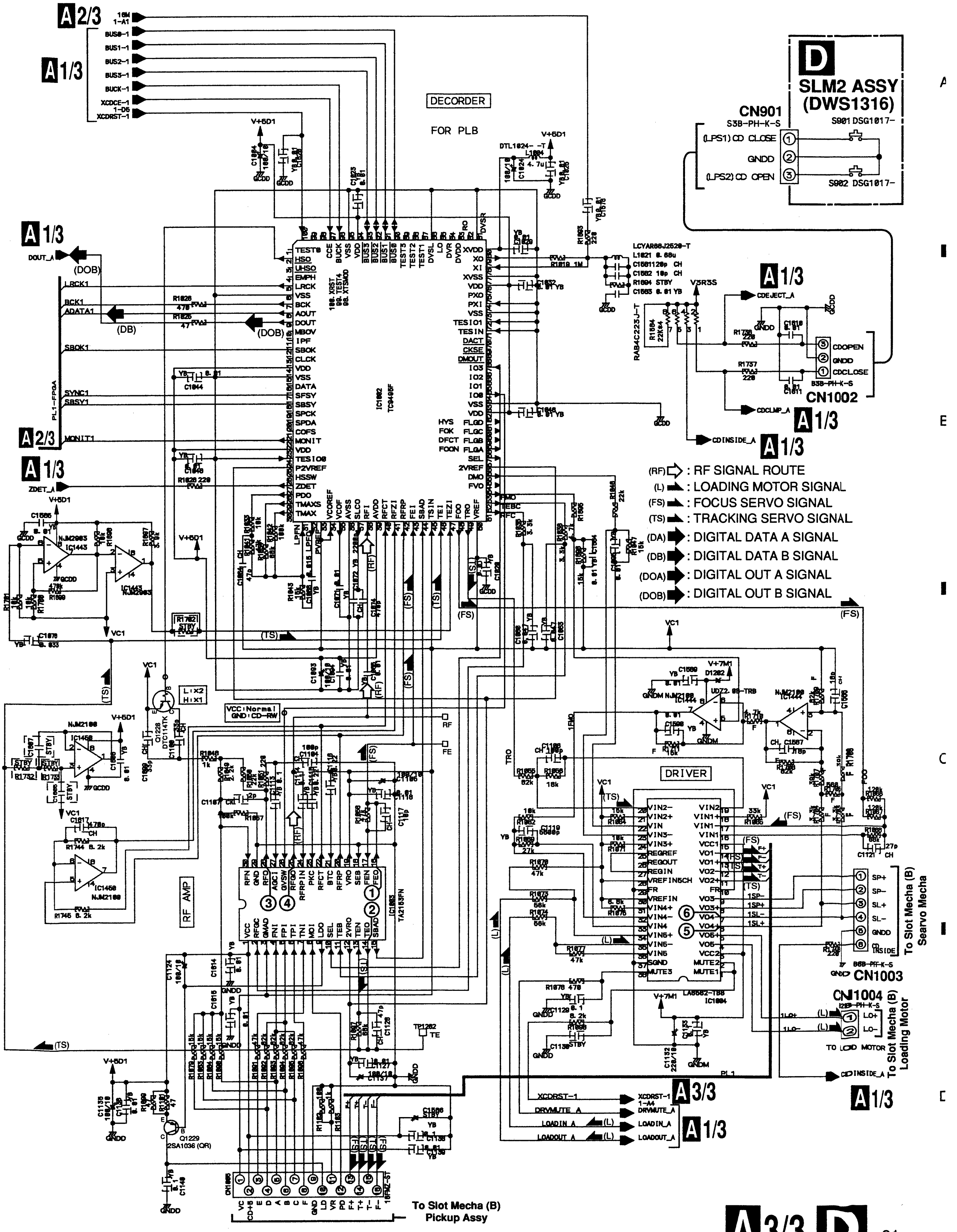
3.5 MAIN (3/3), SLM1 and SLM2 ASSYS


A 3/3 MAIN ASSY
(DWG1556)
C SLM1 ASSY
(DWS1315)
CN801
S3B-PH-K-S
S801 DSG1017-
S802 DSG1017-
(LPS1) CD CLOSE
GNDD
(LPS2) CD OPEN
A 2/3
A 1/3
BUS0-2
BUS1-2
BUS2-2
BUS3-2
BUCK-2
XCDCE-2
1-D3
XCDRST-2
DECORDER
FOR PLA
V+5D2
IC1005
TC9495F
DOUT_B
(DOA)
(DA)
LRCK2
BCK2
ADATA2
SBOK2
SYNC2
SBSY2
MONIT2
ZDET_B
CDINSIDE_B
CDEJECT_B
CDCLMP_B
CDOPEN
GNDD
CDCLOSE
CN1006
B3B-PH-K-S
V3R3
RAB4C223J-T
NJM2100
IC1447
IC1446
(FS)
(TS)
(RF)
(SJ)
VC
Q1002
DTC114TK
L:x2
H:x1
VCC:Normal
GND:CD-RW
RF
FE
TE
RF AMP
IC1010
TA2153FN
DRIVER
IC1011
LA6562-TBB
V+7M2
UD72.0B-TRB
CN1007
To Slot Mecha (A)
Searvo Mecha
SP+
SP-
SL+
SL-
GNDD
CDINSIDE
CN1008
S2B-PH-K-S
LO+
LO-
To Slot Mecha (A)
Loading Motor
CDINSIDE_B
XCDRST-2
DRVMUTE_B
LOADIN_B
LOADOUT_B
(L)
A 3/3
A 1/3
Q1003
2SA1036 (QR)
CN1000
16FMZ-ST
VC
CD+5
E
D
A
B
C
F
GND
LD
VR
PD
T+
T-
F+
F-
To Slot Mecha (A)
Pickup Assy

NOTES
RESISTOR
NO MARK :RS1/16S***J Ω
F :RS1/16S****F Ω
CAPACITOR
NO MARK ELECTROLYTIC
:CEAT μF
NO MARK CERAMIC
:CKSRYB μF
CH :CCSRCH μF
CK :CCSRCK μF
⌞⌝ IS STANBY

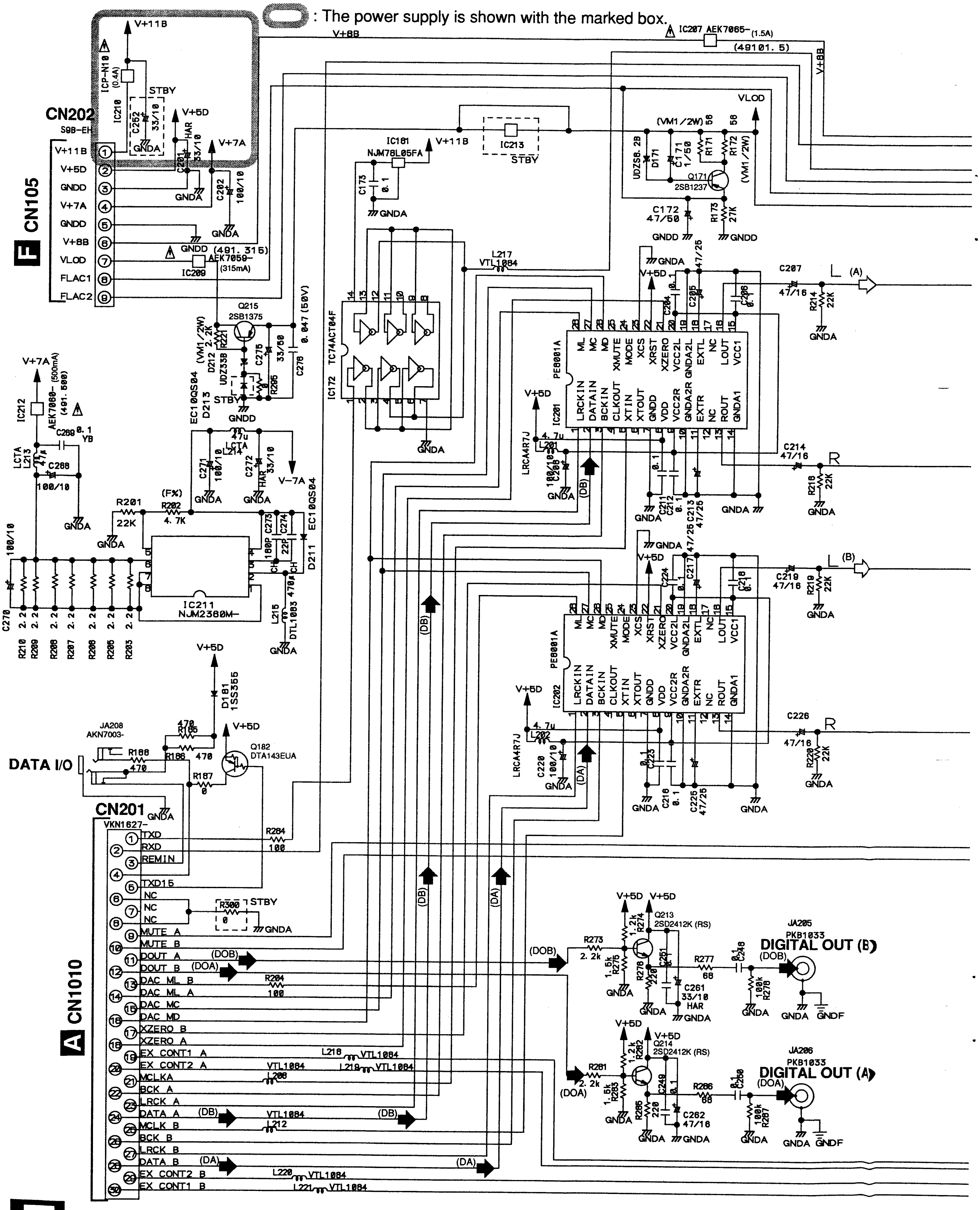
▭ : The power supply is shown with the marked box.

A 3/3 C

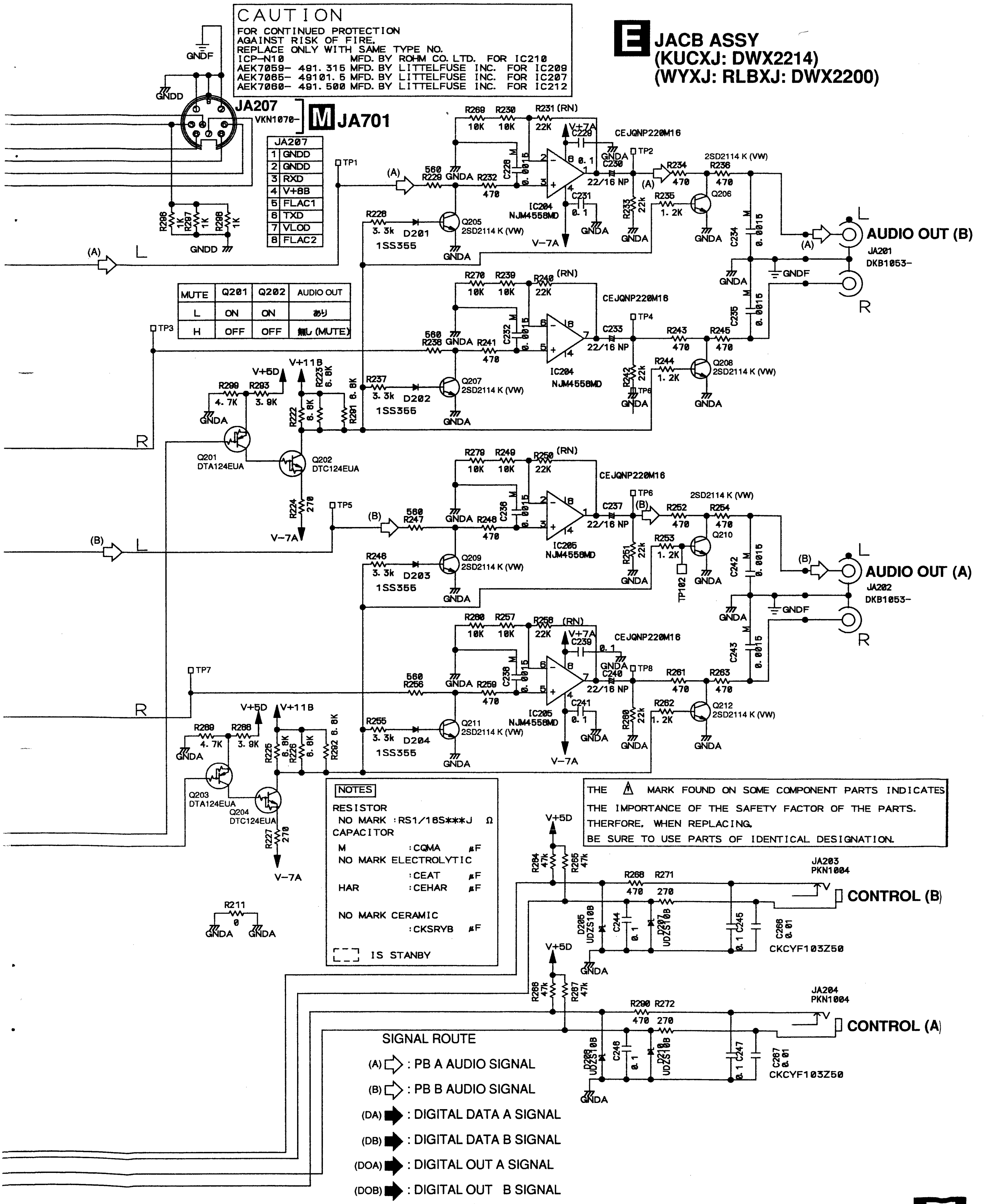

A 2/3
A 1/3
DECORDER
FOR PLB
D
SLM2 ASSY
(DWS1316)
CN901
S3B-PH-K-S
S901 DSG1017-
S902 DSG1017-
(LPS1) CD CLOSE
GNDD
(LPS2) CD OPEN
DOUT_A
(DOB)
(DB)
LRCK1
BCK1
ADATA1
SBOK1
SYNC1
SBSY1
MONIT1
PL1-FPGA
ZDET_A
IC1002
TC9495F
IC1443
NJM2903
CDEJECT_A
CDOPEN
CDCLOSE
CN1002
B3B-PH-K-S
CDCLMP_A
CDINSIDE_A
(RF) : RF SIGNAL ROUTE
(L) : LOADING MOTOR SIGNAL
(FS) : FOCUS SERVO SIGNAL
(TS) : TRACKING SERVO SIGNAL
(DA) : DIGITAL DATA A SIGNAL
(DB) : DIGITAL DATA B SIGNAL
(DOA) : DIGITAL OUT A SIGNAL
(DOB) : DIGITAL OUT B SIGNAL
VCC:Normal
GND:CD-RW
L:x2
H:x1
Q1228
DTC114TK
IC1450
NJM2100
IC1444
NJM2100
RF AMP
IC1003
TA2153FN
DRIVER
IC1004
LA6562-TB8
To Slot Mecha (B)
Servo Mecha
CN1003
B6B-PH-K-S
CN1004
B2B-PH-K-S
LO+
LO-
TO LOD MOTOR
To Slot Mecha (B)
Loading Motor
XCDRST-1
DRVMUTE_A
LOADIN_A
LOADOUT_A
A 3/3
Q1229
2SA1036 (QR)
CN1005
To Slot Mecha (B)
Pickup Assy
16FMZ-ST
TP1202
TE
RF
FE

3.6 JACB ASSY

: The power supply is shown with the marked box.


V+11B
ICP-N10 (0.4A)
IC210
STBY
C252 33/10
V+5D
HAR 33/10
GNDA
C201
V+7A
C202 100/10
CN202
S9B-EH
V+11B
V+5D
GNDD
V+7A
GNDD
V+8B
VLOD
FLAC1
FLAC2
F CN105
GNDD (491.315)
AEK7050- (315mA)
IC209
V+8B
IC207 AEK7065- (1.5A)
(49101.5)
V+8B
VLOD
IC101 NJM78L05FA
V+11B
C173 0.1
GNDA
IC213
STBY
(VM1/2W) 56
UDZS8.2B D171
C171 1/50
R171
R172 56
(VM1/2W)
Q171 2SB1237
C172 47/50
R173 27K
GNDD
L217 VTL1084
C207 47/16
L (A)
R214 22K
GNDA
C204 0.1
C205 47/25
C206 0.1
PE8001A
IC201
ML MC MD XMUTE MODE XCS XRST XZERO VCC2L GNDA2L EXTL NC LOUT VCC1
LRCKIN DATAIN BCKIN CLKOUT XTIN XTOUT GNDD VDD VCC2R GNDA2R EXTR NC ROUT GNDA1
IC172 TC74ACT04F
Q215 2SB1375
(VM1/2W) 2.2K R221
D212 UDZ33B
C275 33/50
R206
C276 0.047 (50V)
EC10QS04 D213
STBY
GNDD
V+5D
LRCA4R7J
4.7u
L201
C208 100/10
(DB)
C214 47/16
R
R218 22K
C211 0.1
C212
C213 47/25
GNDA
V+7A
IC212
AEK7060- (500mA) (491.500)
C269 0.1 YB
LCTA L213 47u
C268 100/10
C271 100/10
LCTA L214 47u
C272 HAR 33/10
V-7A
EC10QS04 D211
R201 22K
(F※) R202 4.7K
C273 180P CH
C274 22P CH
IC211 NJM2360M-
L215 DTL1083 470u
C270 100/10
R210 R209 R208 R207 R206 R205 R203 2.2
C224
C217 47/25
C218 0.1
C219 47/16
L (B)
R219 22K
IC202 PE8001A
LRCA4R7J
4.7u
L202
C220 100/10
(DA)
C223 0.1
C216 0.1
C225 47/25
C226 47/16
R220 22K
V+5D
D181 1SS355
JA208 AKN7003-
DATA I/O
R188 470
R185 470
R186 470
Q182 DTA143EUA
R187 0
CN201
VKN1627-
TXD
RXD
REMIN
TXD15
NC
NC
NC
R300 0
STBY
MUTE A
MUTE B
DOUT A
DOUT B
DAC ML B
DAC ML A
DAC MC
DAC MD
XZERO B
XZERO A
EX CONT1 A
EX CONT2 A
MCLKA
BCK A
LRCK A
DATA A
MCLK B
BCK B
LRCK B
DATA B
EX CONT2 B
EX CONT1 B
A CN1010
R204 100
R204 100
(DOB)
(DOA)
(DB)
(DA)
L218 VTL1084
L219 VTL1084
VTL1084 L206
VTL1084 L212
L220 VTL1084
L221 VTL1084
V+5D V+5D
Q213 2SD2412K (RS)
R274 1.2k
R273 2.2k
R275 1.5k
R276 220
C251 0.1
C261 33/10 HAR
R277 68
C248 0.1
R278 100k
JA205 PKB1033
DIGITAL OUT (B)
(DOB)
GNDA GNDF
Q214 2SD2412K (RS)
R282 1.2k
R281 2.2k
R283 1.5k
R285 220
C249 0.1
C262 47/16
R286 68
C250 0.1
R287 100k
JA206 PKB1033
DIGITAL OUT (A)
(DOA)
GNDA GNDF

E JACB ASSY (KUCXJ: DWX2214) (WYXJ: RLBXJ: DWX2200)


GNDF
GNDD
JA207
VKN1070-
M JA701
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP102
R269 10K
R230 10K
R231 (RN) 22K
V+7A
C229
CEJQNP220M16
C228 0.0015
560 R229
R232 470
IC204 NJM4558MD
C230 22/16 NP
R234 470
R236 470
2SD2114 K (VW)
R233 22k
R235 1.2K
Q206
C234 0.0015
V-7A
R226 3.3k
D201 1SS355
Q205 2SD2114 K (VW)
AUDIO OUT (B)
JA201 DKB1053-
L
R
R270 10K
R239 10K
R240 (RN) 22K
C232 0.0015
560 R238
R241 470
C233 22/16 NP
R243 470
R245 470
R242 22k
R244 1.2K
Q208 2SD2114 K (VW)
C235 0.0015
R237 3.3k
D202 1SS355
Q207 2SD2114 K (VW)
V+5D
V+11B
R299 4.7K
R293 3.9K
R223 6.8K
R222 6.8K
R201 6.8K
Q201 DTA124EUA
Q202 DTC124EUA
R224 270
R279 10K
R249 10K
R250 (RN) 22K
C236 0.0015
560 R247
R248 470
IC205 NJM4558MD
C237 22/16 NP
R252 470
R254 470
R251 22k
R253 1.2K
Q210
C242 0.0015
R246 3.3k
D203 1SS355
Q209 2SD2114 K (VW)
AUDIO OUT (A)
JA202 DKB1053-
R280 10K
R257 10K
R258 (RN) 22K
C239 0.1
C238 0.0015
560 R256
R259 470
C240 22/16 NP
C241 0.1
R261 470
R263 470
R260 22k
R262 1.2K
Q212 2SD2114 K (VW)
C243 0.0015
R255 3.3k
D204 1SS355
Q211 2SD2114 K (VW)
R289 4.7K
R288 3.9K
R225 6.8K
R226 6.8K
R292 6.8K
Q203 DTA124EUA
Q204 DTC124EUA
R227 270
R211 0
GNDA
R264 47k
R265 47k
R268 470
R271 270
D205 UDZS10B
C244 0.1
D207 UDZS10B
C245 0.1
C266 0.01
CKCYF103Z50
JA203 PKN1004
CONTROL (B)
R286 47k
R287 47k
R290 470
R272 270
D208 UDZS10B
C246 0.1
D210 UDZS10B
C247 0.1
C267 0.01
JA204 PKN1004
CONTROL (A)

CAUTION
FOR CONTINUED PROTECTION
AGAINST RISK OF FIRE.
REPLACE ONLY WITH SAME TYPE NO.
ICP-N10 MFD. BY ROHM CO. LTD. FOR IC210
AEK7059- 491.315 MFD. BY LITTELFUSE INC. FOR IC209
AEK7065- 49101.5 MFD. BY LITTELFUSE INC. FOR IC207
AEK7060- 491.500 MFD. BY LITTELFUSE INC. FOR IC212

JA207	
1	GNDD
2	GNDD
3	RXD
4	V+8B
5	FLAC1
6	TXD
7	VLOD
8	FLAC2

MUTE	Q201	Q202	AUDIO OUT
L	ON	ON	あり
H	OFF	OFF	無し (MUTE)

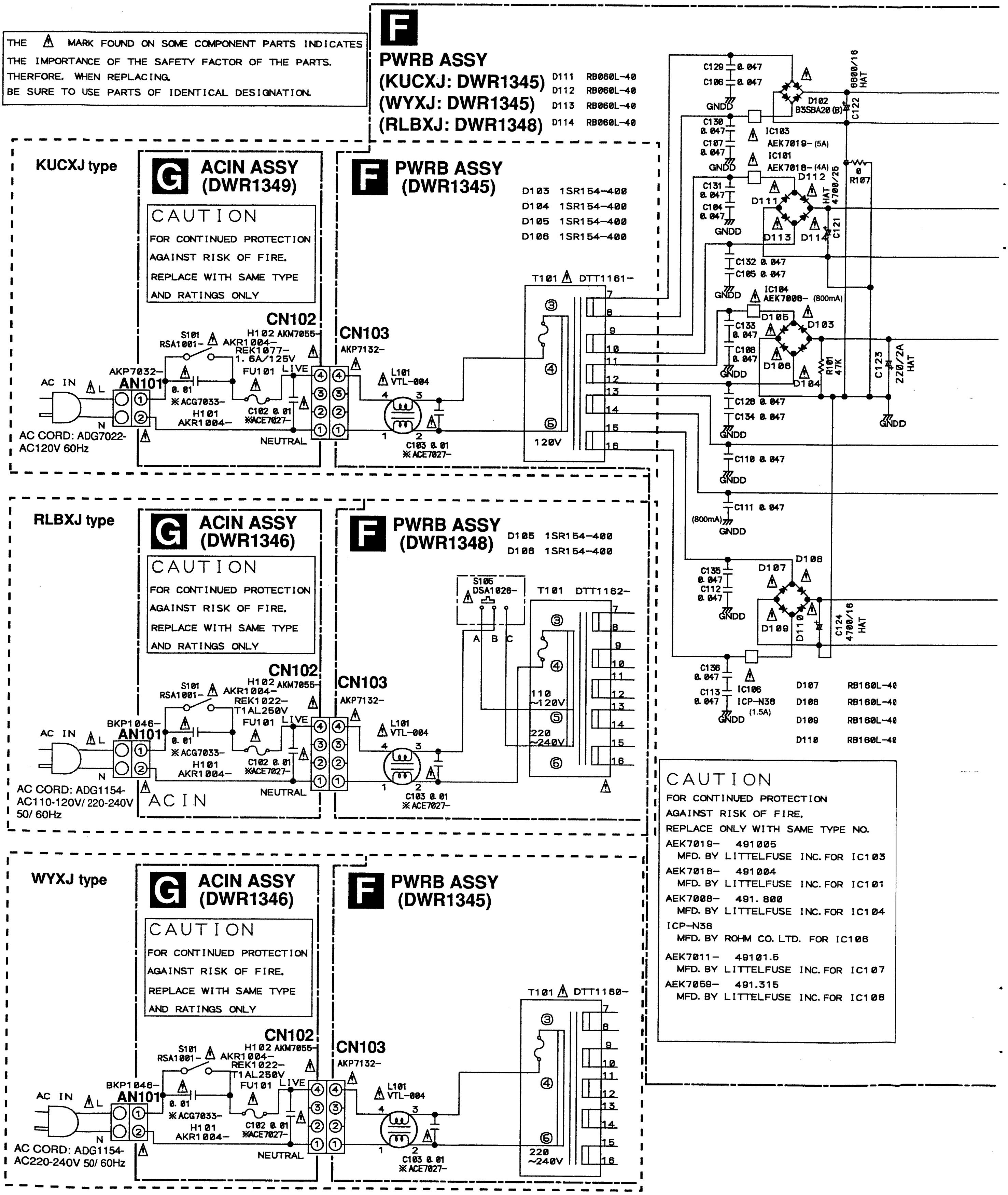
NOTES
RESISTOR
NO MARK :RS1/16S***J Ω
CAPACITOR
M :CQMA μF
NO MARK ELECTROLYTIC
:CEAT μF
HAR :CEHAR μF
NO MARK CERAMIC
:CKSRYB μF
[ ] IS STANBY

THE ⚠ MARK FOUND ON SOME COMPONENT PARTS INDICATES THE IMPORTANCE OF THE SAFETY FACTOR OF THE PARTS. THERFORE, WHEN REPLACING, BE SURE TO USE PARTS OF IDENTICAL DESIGNATION.

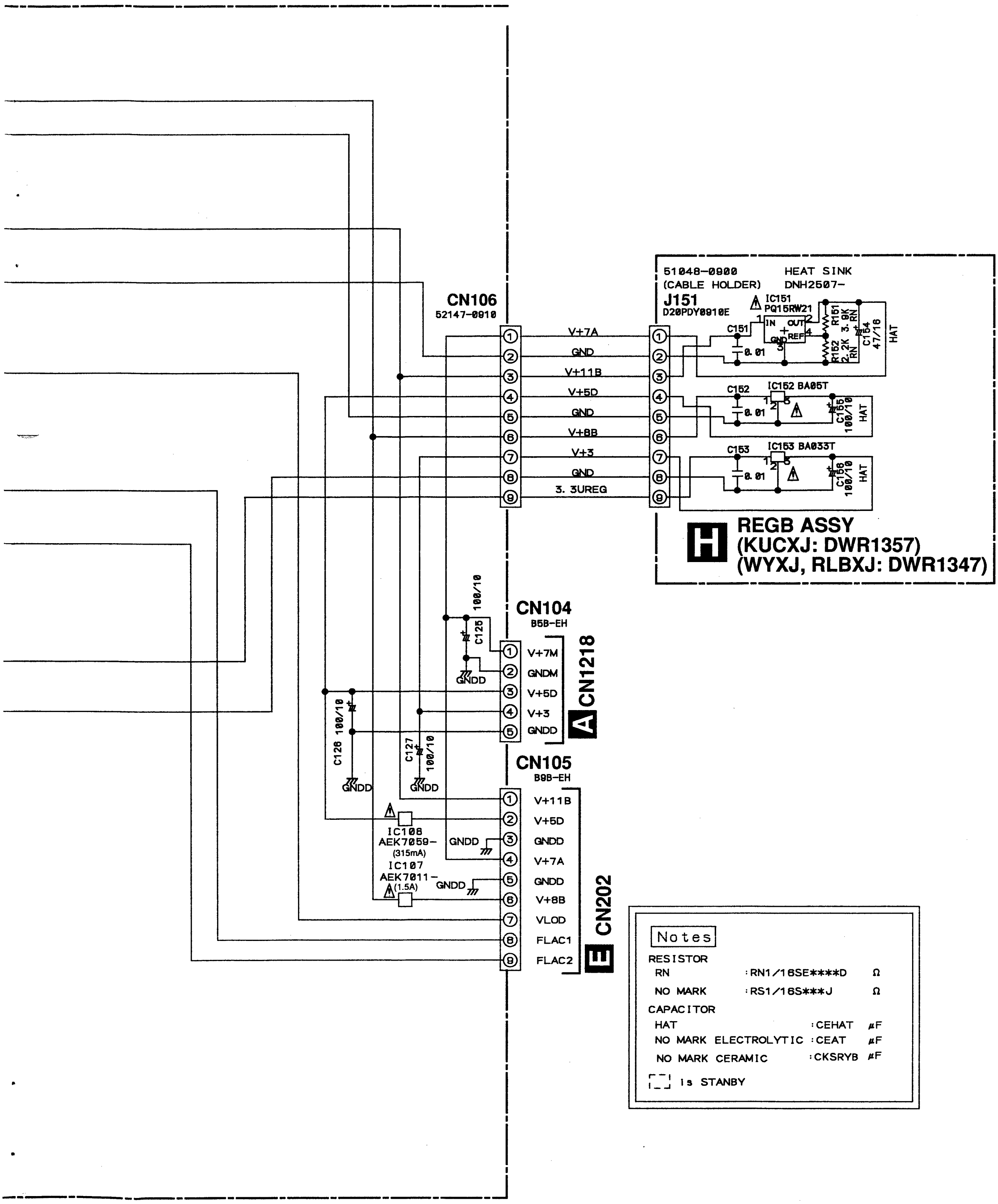
SIGNAL ROUTE
(A) ⇨ : PB A AUDIO SIGNAL
(B) ⇨ : PB B AUDIO SIGNAL
(DA) ➡ : DIGITAL DATA A SIGNAL
(DB) ➡ : DIGITAL DATA B SIGNAL
(DOA) ➡ : DIGITAL OUT A SIGNAL
(DOB) ➡ : DIGITAL OUT B SIGNAL

3.7 PWRB, REGB and ACIN ASSYS

THE ⚠ MARK FOUND ON SOME COMPONENT PARTS INDICATES THE IMPORTANCE OF THE SAFETY FACTOR OF THE PARTS. THERFORE, WHEN REPLACING, BE SURE TO USE PARTS OF IDENTICAL DESIGNATION.


F
PWRB ASSY
(KUCXJ: DWR1345)
(WYXJ: DWR1345)
(RLBXJ: DWR1348)
D111 RB060L-40
D112 RB060L-40
D113 RB060L-40
D114 RB060L-40
KUCXJ type
G ACIN ASSY (DWR1349)
CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY
F PWRB ASSY (DWR1345)
D103 1SR154-400
D104 1SR154-400
D105 1SR154-400
D106 1SR154-400
T101 DTT1161-
CN102
H102 AKM7055-
S101 RSA1001-
AKR1004-
REK1077-
1.6A/125V
FU101
LIVE
CN103
AKP7132-
L101 VTL-004
AKP7032-
AN101
AC IN
L
N
0.01
※ACG7033-
H101 AKR1004-
C102 0.01 ※ACE7027-
NEUTRAL
C103 0.01 ※ACE7027-
AC CORD: ADG7022-
AC120V 60Hz
120V
C129 0.047
C106 0.047
GNDD
D102 B3SBA20 (B)
6800/16 HAT
C122
C130 0.047
C107 0.047
IC103 AEK7019- (5A)
IC101 AEK7018- (4A)
0 R107
C131 0.047
C104 0.047
D111
D112
D113
D114
4700/25 HAT
C121
C132 0.047
C105 0.047
IC104 AEK7008- (800mA)
C133 0.047
C108 0.047
D105
D103
D106
D104
R101 47K
C123
220/2A HAT
C128 0.047
C134 0.047
C110 0.047
C111 0.047
(800mA)
RLBXJ type
G ACIN ASSY (DWR1346)
CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY
F PWRB ASSY (DWR1348)
D105 1SR154-400
D106 1SR154-400
S105 DSA1026-
T101 DTT1162-
A B C
110 ~120V
220 ~240V
CN102
H102 AKM7055-
S101 RSA1001-
AKR1004-
REK1022-
T1AL250V
FU101
LIVE
CN103
AKP7132-
L101 VTL-004
BKP1046-
AN101
AC IN
0.01
※ACG7033-
H101 AKR1004-
C102 0.01 ※ACE7027-
NEUTRAL
C103 0.01 ※ACE7027-
AC CORD: ADG1154-
AC110-120V/ 220-240V 50/ 60Hz
AC IN
C135 0.047
C112 0.047
D107
D108
D109
D110
C124 4700/16 HAT
C136 0.047
C113 0.047
IC106 ICP-N38 (1.5A)
D107 RB160L-40
D108 RB160L-40
D109 RB160L-40
D110 RB160L-40
WYXJ type
G ACIN ASSY (DWR1346)
CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY
F PWRB ASSY (DWR1345)
T101 DTT1160-
CN102
H102 AKM7055-
S101 RSA1001-
AKR1004-
REK1022-
T1AL250V
FU101
LIVE
CN103
AKP7132-
L101 VTL-004
BKP1046-
AN101
AC IN
0.01
※ACG7033-
H101 AKR1004-
C102 0.01 ※ACE7027-
NEUTRAL
C103 0.01 ※ACE7027-
AC CORD: ADG1154-
AC220-240V 50/ 60Hz
220 ~240V

CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE ONLY WITH SAME TYPE NO.
AEK7019- 491005
MFD. BY LITTELFUSE INC. FOR IC103
AEK7018- 491004
MFD. BY LITTELFUSE INC. FOR IC101
AEK7008- 491.800
MFD. BY LITTELFUSE INC. FOR IC104
ICP-N38
MFD. BY ROHM CO. LTD. FOR IC106
AEK7011- 49101.5
MFD. BY LITTELFUSE INC. FOR IC107
AEK7059- 491.315
MFD. BY LITTELFUSE INC. FOR IC108


CN106
52147-0910
V+7A
GND
V+11B
V+5D
GND
V+8B
V+3
GND
3. 3UREG
51048-0900
(CABLE HOLDER)
HEAT SINK
DNH2507-
J151
D20PDY0910E
IC151
PQ15RW21
IN
OUT
GND
REF
C151
0.01
R151
3.9K
RN
R152
2.2K
RN
C154
47/16
HAT
C152
IC152 BA05T
C155
100/10
C153
IC153 BA033T
C156
100/10
H
REGB ASSY
(KUCXJ: DWR1357)
(WYXJ, RLBXJ: DWR1347)
CN104
B5B-EH
C125
100/10
GNDD
V+7M
GNDM
V+5D
V+3
GNDD
A
CN1218
C126 100/10
C127
100/10
CN105
B9B-EH
IC108
AEK7059-
(315mA)
IC107
AEK7011-
(1.5A)
V+11B
V+5D
GNDD
V+7A
GNDD
V+8B
VLOD
FLAC1
FLAC2
E
CN202

Notes

RESISTOR

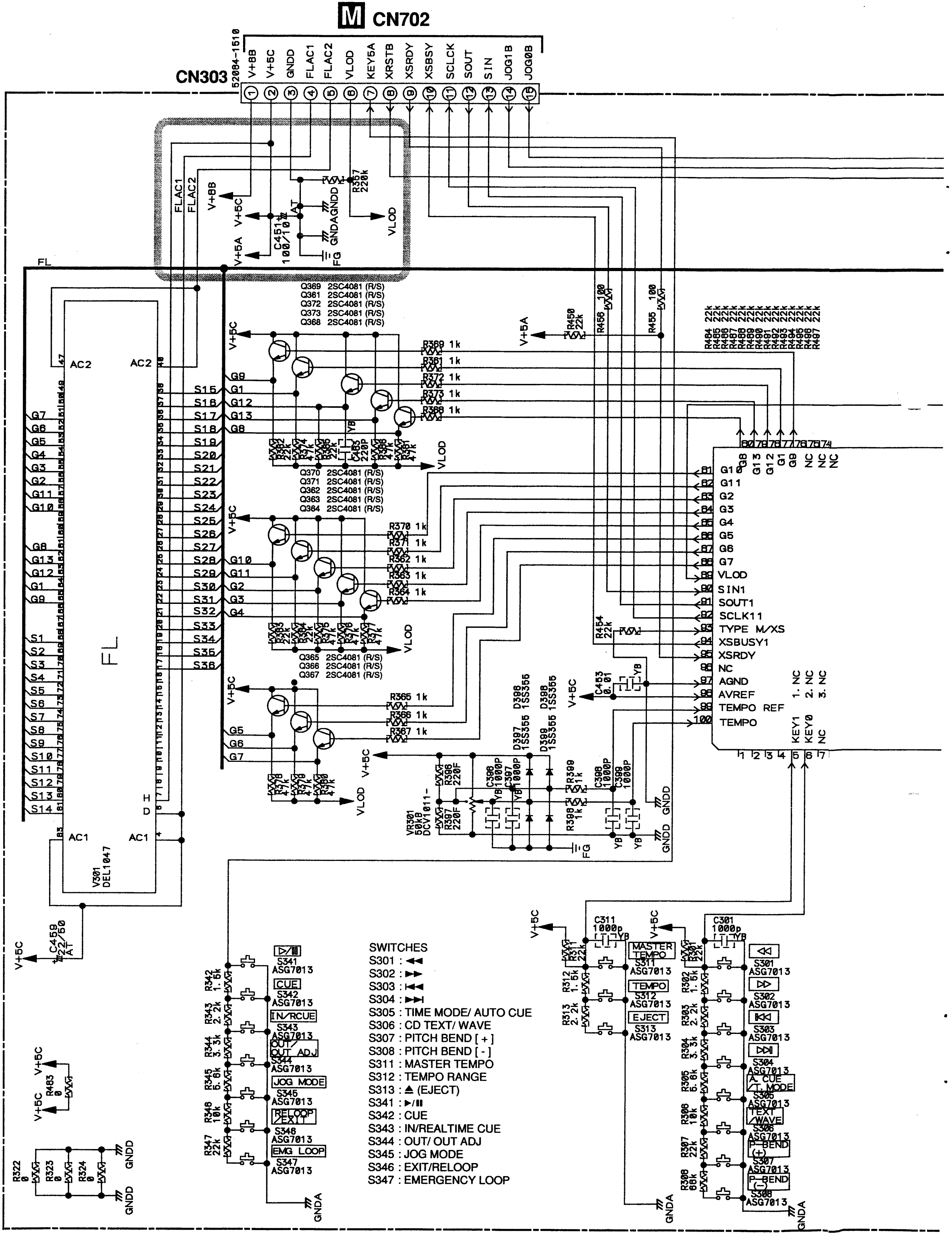
RN	:RN1/16SE****D	Ω
NO MARK	:RS1/16S***J	Ω

CAPACITOR

HAT	:CEHAT	µF
NO MARK ELECTROLYTIC	:CEAT	µF
NO MARK CERAMIC	:CKSRYB	µF

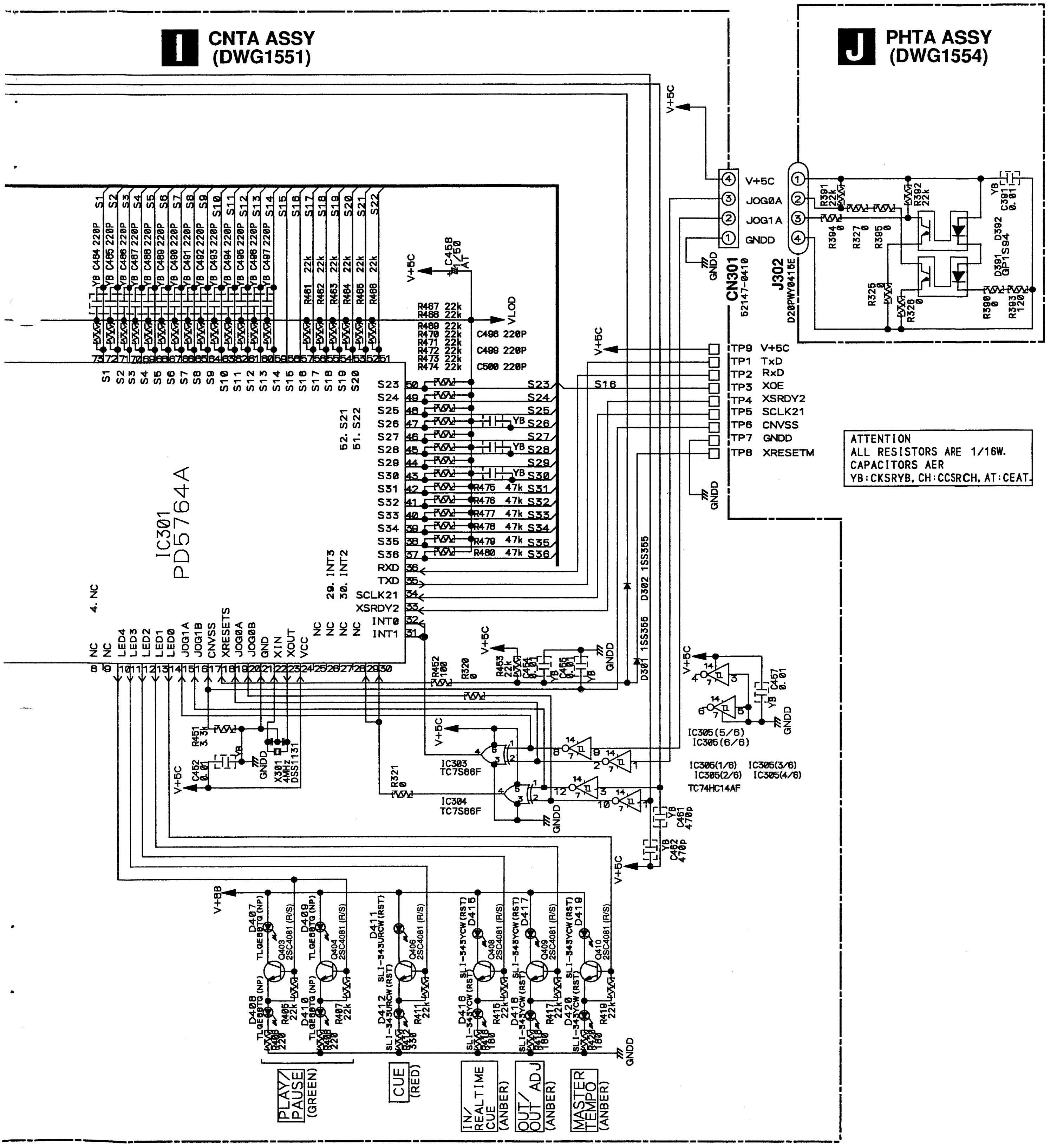
[ ] Is STANBY

3.8 CNTA and PHTA ASSYS


M CN702
CN303
52084-1510
V+BB
V+5C
GNDD
FLAC1
FLAC2
VLOD
KEY5A
XRSTB
XSRDY
XSBSY
SCLCK
SOUT
SIN
JOG1B
JOG0B
R357 220k
C451 100/10
AT
GNDA
GNDD
FG
V+5A
FL
Q369 2SC4081 (R/S)
Q361 2SC4081 (R/S)
Q372 2SC4081 (R/S)
Q373 2SC4081 (R/S)
Q368 2SC4081 (R/S)
Q370 2SC4081 (R/S)
Q371 2SC4081 (R/S)
Q362 2SC4081 (R/S)
Q363 2SC4081 (R/S)
Q364 2SC4081 (R/S)
Q365 2SC4081 (R/S)
Q366 2SC4081 (R/S)
Q367 2SC4081 (R/S)
R450 22k
R456 100
R455 100
AC2
AC1
H
D
V301 DEL1047
G10
G11
G2
G3
G4
G5
G6
G7
VLOD
SIN1
SOUT1
SCLK11
TYPE M/XS
XSBUSY1
XSRDY
NC
AGND
AVREF
TEMPO REF
TEMPO
KEY1
KEY0
R454 22k
C453 0.01
D398 1SS355
D397 1SS355
D399 1SS355
VR301 50kB DCV1011-
R396 220F
R397 220F
C398 1000P
C397 1000P
C390 1000P
C399 1000P
R389 1k
R390 1k
C459 22/50
R483 0
R322 0
R323 0
R324 0
C311 1000p
C301 1000p
S341 ASG7013
S342 CUE ASG7013
S343 IN/RCUE ASG7013
S344 OUT/OUT ADJ ASG7013
S345 JOG MODE ASG7013
S346 RELOOP/EXIT ASG7013
S347 EMG LOOP ASG7013
S311 MASTER TEMPO ASG7013
S312 TEMPO ASG7013
S313 EJECT ASG7013
S301 ASG7013
S302 ASG7013
S303 ASG7013
S304 ASG7013
S305 A. CUE/T. MODE ASG7013
S306 TEXT/WAVE ASG7013
S307 P-BEND (+) ASG7013
S308 P-BEND (-) ASG7013
R342 1.5k
R343 2.2k
R344 3.3k
R345 5.6k
R346 10k
R347 22k
R311 22k
R312 1.5k
R313 2.2k
R301 22k
R302 1.5k
R303 2.2k
R304 3.3k
R305 5.6k
R306 10k
R307 22k
R308 68k

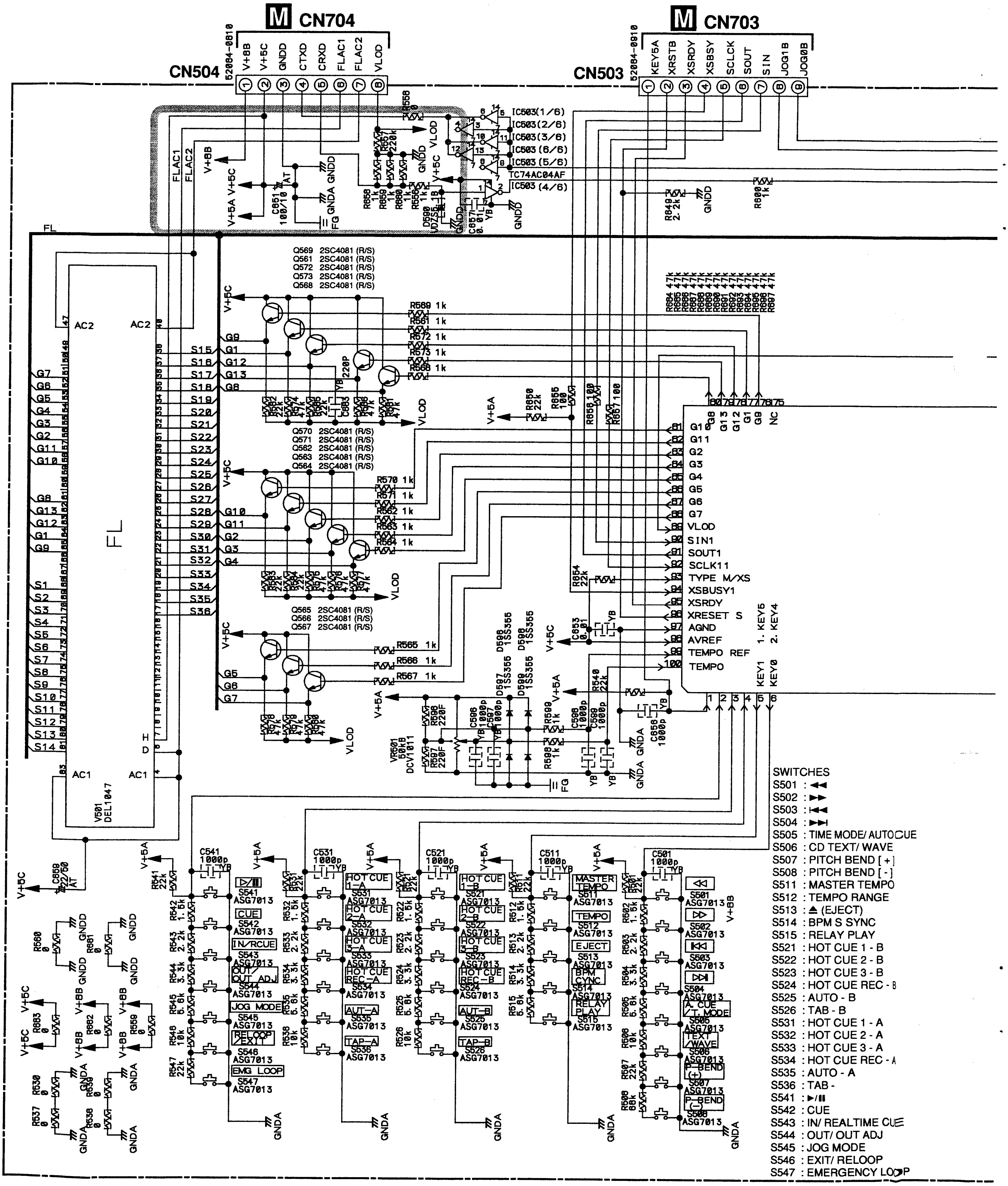
SWITCHES
S301 : ◀◀
S302 : ▶▶
S303 : |◀◀
S304 : ▶▶|
S305 : TIME MODE/ AUTO CUE
S306 : CD TEXT/ WAVE
S307 : PITCH BEND [+]
S308 : PITCH BEND [-]
S311 : MASTER TEMPO
S312 : TEMPO RANGE
S313 : ▲ (EJECT)
S341 : ▶/II
S342 : CUE
S343 : IN/REALTIME CUE
S344 : OUT/ OUT ADJ
S345 : JOG MODE
S346 : EXIT/RELOOP
S347 : EMERGENCY LOOP

: The power supply is shown with the marked box.


I
CNTA ASSY
(DWG1551)
J
PHTA ASSY
(DWG1554)
IC301
PD5764A
CN301
52147-0410
J302
D20PWY0415E
V+5C
JOG0A
JOG1A
GNDD
TP9 V+5C
TP1 TxD
TP2 RxD
TP3 XOE
TP4 XSRDY2
TP5 SCLK21
TP6 CNVSS
TP7 GNDD
TP8 XRESETM
VLOD
V+5C
V+8B
GNDD
D391 D392 GP1S94
D302 1SS355
D301 1SS355
X301 4MHz DSS1131
IC303 TC7S86F
IC304 TC7S86F
IC305(1/6) IC305(3/6)
IC305(2/6) IC305(4/6)
IC305(5/6)
IC305(6/6)
TC74HC14AF
LED4 LED3 LED2 LED1 LED0
JOG1A JOG1B CNVSS XRESETS JOG0A JOG0B GND XIN XOUT VCC
RXD TXD SCLK21 XSRDY2 INT0 INT1
PLAY/PAUSE (GREEN)
CUE (RED)
IN/REALTIME CUE (ANBER)
OUT/OUT ADJ (ANBER)
MASTER TEMPO (ANBER)

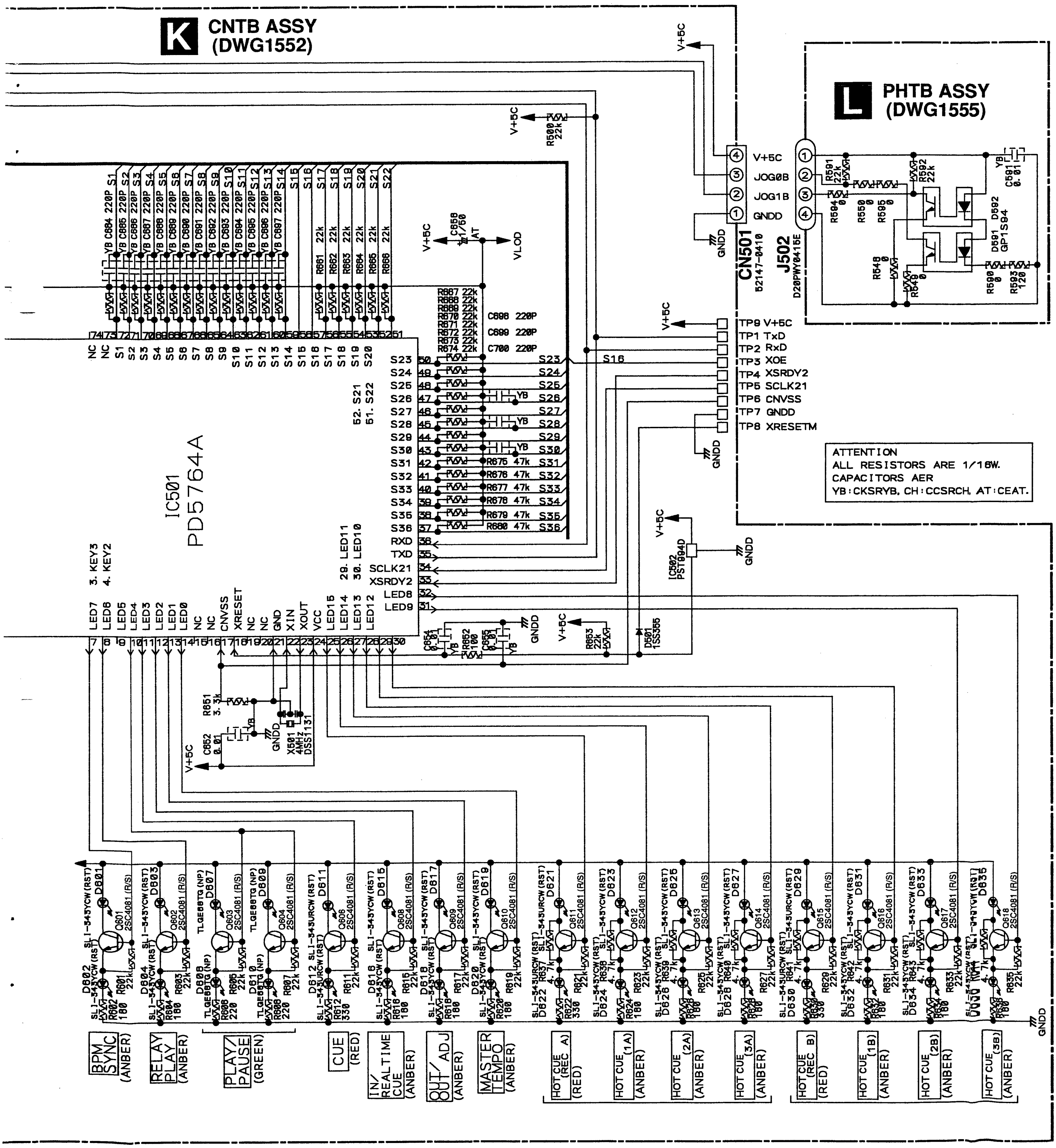
ATTENTION
ALL RESISTORS ARE 1/16W.
CAPACITORS AER
YB:CKSRYB, CH:CCSRCH, AT:CEAT.

3.9 CNTB and PHTB ASSYS


M CN704
CN504
52084-0810
V+8B
V+5C
GNDD
CTXD
CRXD
FLAC1
FLAC2
VLOD
M CN703
CN503
52084-0810
KEY5A
XRSTB
XSRDY
XSBSY
SCLCK
SOUT
SIN
JOG1B
JOG0B
IC503(1/6)
IC503(2/6)
IC503(3/6)
IC503(6/6)
IC503(5/6)
TC74AC04AF
IC503(4/6)
C651 100/10 AT
GNDA
GNDD
FG
D590 UDZS5.1B
C657 0.01 YB
R849 2.2k
R600 1k
FL
Q569 2SC4081 (R/S)
Q561 2SC4081 (R/S)
Q572 2SC4081 (R/S)
Q573 2SC4081 (R/S)
Q568 2SC4081 (R/S)
Q570 2SC4081 (R/S)
Q571 2SC4081 (R/S)
Q562 2SC4081 (R/S)
Q563 2SC4081 (R/S)
Q564 2SC4081 (R/S)
Q565 2SC4081 (R/S)
Q566 2SC4081 (R/S)
Q567 2SC4081 (R/S)
R569 1k
R561 1k
R572 1k
R573 1k
R568 1k
R570 1k
R571 1k
R562 1k
R563 1k
R564 1k
R565 1k
R566 1k
R567 1k
R684 47k
R685 47k
R686 47k
R687 47k
R688 47k
R689 47k
R690 47k
R691 47k
R692 47k
R693 47k
R694 47k
R695 47k
R696 47k
R697 47k
AC2
AC1
V501 DEL1047
H
D
C659 22/50 AT
V+5C
V+5A
V+8B
VLOD
R650 22k
R655 100
R656 100
R657 100
R654 22k
C653 0.01 YB
D595 1SS355
D596 1SS355
D597 1SS355
D598 1SS355
VR501 50kB DCV1011
R596 220F
R597 220F
C586 1000p
C587 1000p
R599 1k
R598 1k
C588 1000p
C589 1000p
R540 22k
C656 1000p
G10 G11 G2 G3 G4 G5 G6 G7
VLOD
SIN1
SOUT1
SCLK11
TYPE M/XS
XSBUSY1
XSRDY
XRESET S
AGND
AVREF
TEMPO REF
TEMPO
G8 G13 G12 G1 G9 NC
KEY1 KEY0
1. KEY5
2. KEY4
C541 1000p YB
C531 1000p YB
C521 1000p YB
C511 1000p YB
C501 1000p YB
S541 ASG7013
S542 ASG7013
S543 ASG7013
S544 ASG7013
S545 ASG7013
S546 ASG7013
S547 ASG7013
S531 ASG7013
S532 ASG7013
S533 ASG7013
S534 ASG7013
S535 ASG7013
S536 ASG7013
S521 ASG7013
S522 ASG7013
S523 ASG7013
S524 ASG7013
S525 ASG7013
S526 ASG7013
S511 ASG7013
S512 ASG7013
S513 ASG7013
S514 ASG7013
S515 ASG7013
S501 ASG7013
S502 ASG7013
S503 ASG7013
S504 ASG7013
S505 ASG7013
S506 ASG7013
S507 ASG7013
S508 ASG7013
CUE
IN/RCUE
OUT/OUT ADJ
JOG MODE
RELOOP/EXIT
EMG LOOP
HOT CUE 1-A
HOT CUE 2-A
HOT CUE 3-A
HOT CUE REC-A
AUT-A
TAP-A
HOT CUE 1-B
HOT CUE 2-B
HOT CUE 3-B
HOT CUE REC-B
AUT-B
TAP-B
MASTER TEMPO
TEMPO
EJECT
BPM SYNC
RELAY PLAY
A. CUE /T. MODE
TEXT /WAVE
P-BEND (+)
P-BEND (-)
R541 22k
R542 1.5k
R543 2.2k
R544 3.3k
R545 5.6k
R546 10k
R547 22k
R531 22k
R532 1.5k
R533 2.2k
R534 3.3k
R535 5.6k
R536 10k
R521 22k
R522 1.5k
R523 2.2k
R524 3.3k
R525 5.6k
R526 10k
R511 22k
R512 1.5k
R513 2.2k
R514 3.3k
R515 5.6k
R502 22k
R503 1.5k
R504 2.2k
R505 3.3k
R506 5.6k
R507 10k
R508 22k
R509 68k
R660 0
R661 0
R663 0
R662 0
R559 0
R530 0
R539 0
R537 0
R538 0

SWITCHES
S501 : ◀◀
S502 : ▶▶
S503 : |◀◀
S504 : ▶▶|
S505 : TIME MODE/ AUTOCUE
S506 : CD TEXT/ WAVE
S507 : PITCH BEND [+]
S508 : PITCH BEND [-]
S511 : MASTER TEMPO
S512 : TEMPO RANGE
S513 : ▲ (EJECT)
S514 : BPM S SYNC
S515 : RELAY PLAY
S521 : HOT CUE 1 - B
S522 : HOT CUE 2 - B
S523 : HOT CUE 3 - B
S524 : HOT CUE REC - B
S525 : AUTO - B
S526 : TAB - B
S531 : HOT CUE 1 - A
S532 : HOT CUE 2 - A
S533 : HOT CUE 3 - A
S534 : HOT CUE REC - A
S535 : AUTO - A
S536 : TAB -
S541 : ▶/II
S542 : CUE
S543 : IN/ REALTIME CUE
S544 : OUT/ OUT ADJ
S545 : JOG MODE
S546 : EXIT/ RELOOP
S547 : EMERGENCY LOOP

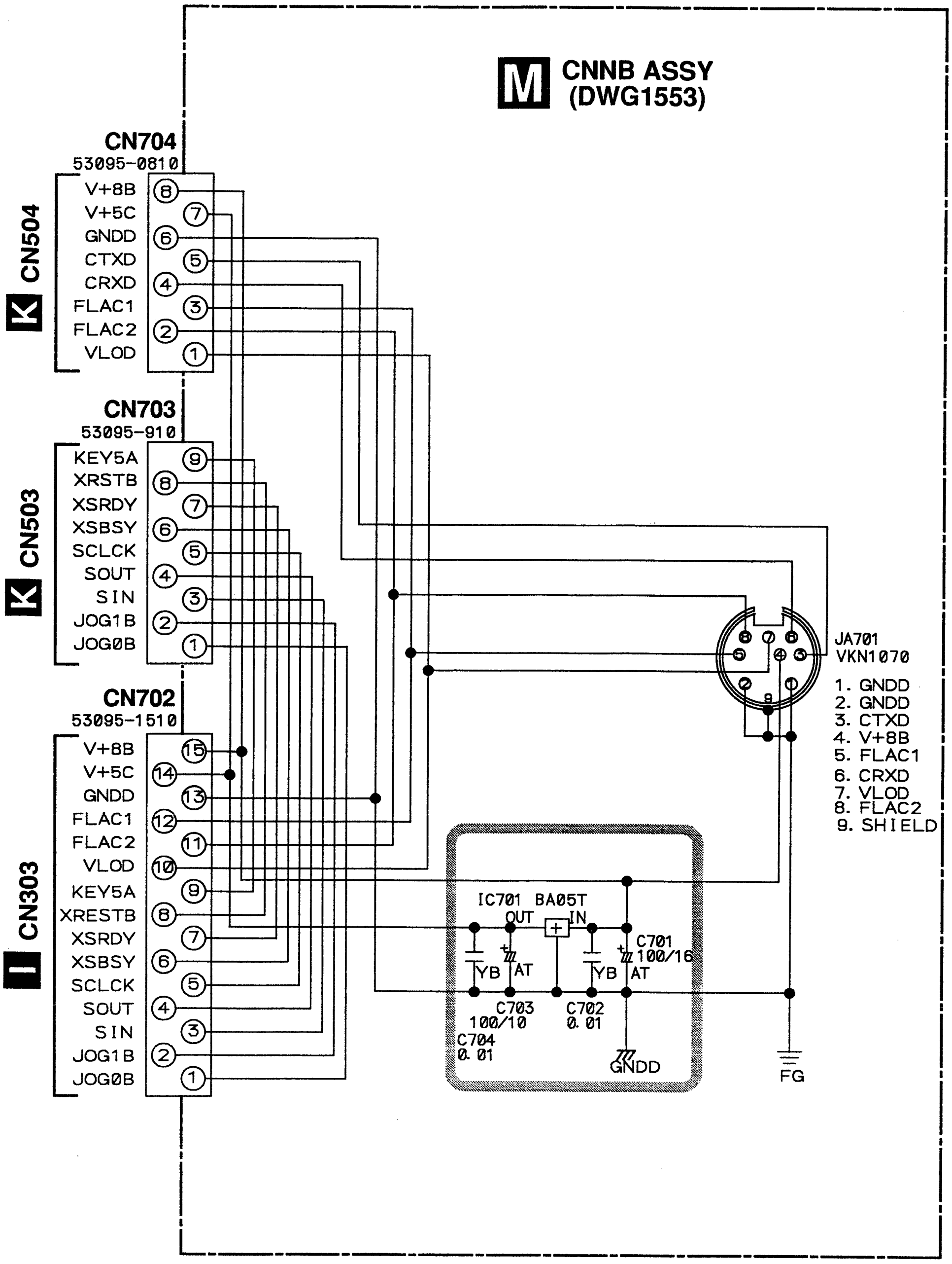
: The power supply is shown with the marked box.


K CNTB ASSY (DWG1552)
L PHTB ASSY (DWG1555)
IC501 PD5764A
CN501 52147-0410
J502 D20PWY0415E
V+5C
JOG0B
JOG1B
GNDD
VLOD
R500 22k
C658 47/50 AT
S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21 S22
S23 S24 S25 S26 S27 S28 S29 S30 S31 S32 S33 S34 S35 S36
RXD TXD SCLK21 XSRDY2 LED8 LED9
LED7 LED6 LED5 LED4 LED3 LED2 LED1 LED0 NC NC CNVSS XRESET NC NC GND XIN XOUT VCC LED15 LED14 LED13 LED12
3. KEY3 4. KEY2
29. LED11 30. LED10
52. S21 51. S22
R675 47k R676 47k R677 47k R678 47k R679 47k R680 47k
C698 220P C699 220P C700 220P
TP9 V+5C
TP1 TxD
TP2 RxD
TP3 XOE
TP4 XSRDY2
TP5 SCLK21
TP6 CNVSS
TP7 GNDD
TP8 XRESETM
IC502 PST994D
D501 1SS355
R653 22k
R651 3.3k
C652 0.01
X501 4MHz DSS1131
R591 22k
R592 22k
C591 0.01
D591 D592 GP1S94
R590 0
R593 120
BPM SYNC (ANBER)
RELAY PLAY (ANBER)
PLAY/PAUSE (GREEN)
CUE (RED)
IN/REALTIME CUE (ANBER)
OUT/ADJ (ANBER)
MASTER TEMPO (ANBER)
HOT CUE (REC A) (RED)
HOT CUE (1A) (ANBER)
HOT CUE (2A) (ANBER)
HOT CUE (3A) (ANBER)
HOT CUE (REC B) (RED)
HOT CUE (1B) (ANBER)
HOT CUE (2B) (ANBER)
HOT CUE (3B) (ANBER)
2SC4081 (R/S)
SLI-343YCW (RST)
SLI-343URCW (RST)
TLGE68TG (NP)

ATTENTION
ALL RESISTORS ARE 1/16W.
CAPACITORS AER
YB:CKSRYB, CH:CCSRCH, AT:CEAT.

3.10 CNNB ASSY

▢ : The power supply is shown with the marked box.


M CNNB ASSY
(DWG1553)
CN704
53095-0810
K CN504
V+8B 8
V+5C 7
GNDD 6
CTXD 5
CRXD 4
FLAC1 3
FLAC2 2
VLOD 1
CN703
53095-910
K CN503
KEY5A 9
XRSTB 8
XSRDY 7
XSBSY 6
SCLCK 5
SOUT 4
SIN 3
JOG1B 2
JOG0B 1
CN702
53095-1510
I CN303
V+8B 15
V+5C 14
GNDD 13
FLAC1 12
FLAC2 11
VLOD 10
KEY5A 9
XRESTB 8
XSRDY 7
XSBSY 6
SCLCK 5
SOUT 4
SIN 3
JOG1B 2
JOG0B 1
JA701
VKN1070
1. GNDD
2. GNDD
3. CTXD
4. V+8B
5. FLAC1
6. CRXD
7. VLOD
8. FLAC2
9. SHIELD
IC701 BA05T
OUT
IN
C701
100/16
YB
AT
C703
100/10
C702
0.01
C704
0.01
GNDD
FG

ATTENTION
CAPACITORS ARE
YB : CKSRYB, AT : CEAT.

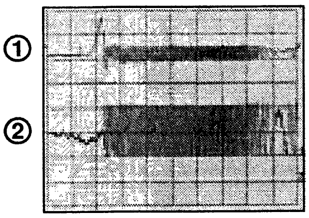
■ Waveforms

A 3/3 MAIN ASSY

Mode: Focus IN

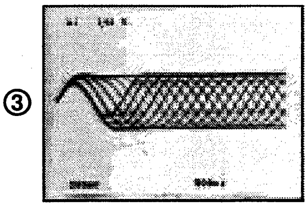
① **IC1010- 16pin (FE)**
IC1003- 16pin (FE)
V: 0.5V/div. H: 5mS/div.

② **IC1010- 14pin (TE)**
IC1003- 14pin (TE)
V: 1V/div. H: 5mS/div.



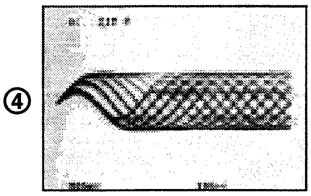
Mode: RF (Play Mode x1)

③ **IC1010- 28pin (RFO)**
IC1003- 28pin (RFO)
V: 500mV/div. H: 500nS/div.



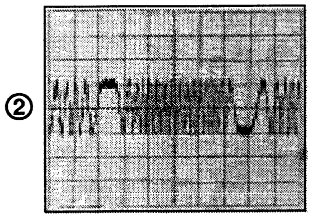
Mode: AGC RF (PLAY MODE x2)

④ **IC1010- 25pin (RFGO)**
IC1003- 25pin (RFGO
V: 500mV/div. H: 200nS/div.



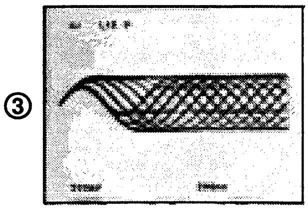
Mode: Tracking Open

② **IC1010- 14pin (TE)**
IC1003- 14pin (TE)
V: 1V/div. H: 2mS/div.



Mode: RF (Play Mode x2)

③ **IC1010- 28pin (RFO)**
IC1003- 28pin (RFO)
V: 500mV/div. H: 200nS/div.

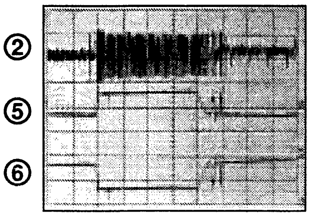


Mode: 1 Track → 16 Track Serch

② **IC1010- 14pin (TE)**
IC1003- 14pin (TE)
V: 1V/div. H: 0.2S/div.

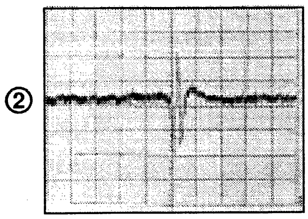
⑤ **IC1011- 6pin (SL+)**
IC1004- 6pin (SL+)
V: 2V/div. H: 0.2S/div.

⑥ **IC1011- 7pin (SL-)**
IC1004- 7pin (SL-)
V: 2V/div. H: 0.2S/div.



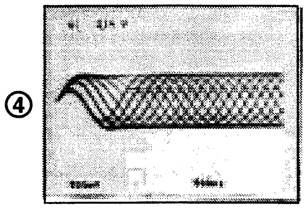
Mode: 1 Track Jump

② **IC1010- 14pin (TE)**
IC1003- 14pin (TE)
V: 0.5V/div. H: 2mS/div.



Mode: AGC RF (Play Mode x1)

④ **IC1010- 25pin (RFGO)**
IC1003- 25pin (RFGO)
V: 500mV/div. H: 500nS/div.



■ Voltage (1/3)

A 1/3 MAIN ASSY

IC1200 (DYW1701)

Pin No.	Voltage (V)
1	0 to 3.2
2	0 to 3.2
3	0 to 3.2
4	0 to 3.2
5	0 to 3.2
6	0 to 3.2
7	0 to 3.2
8	0 to 3.2
9	0 to 3.2
10	0.7
11	0.7
12	0 to 3.2
13	0.7
14	0.7
15	3.1
16	0 to 3.2
17	0 to 3.2
18	0 to 3.2
19	0 to 3.2
20	0 to 3.2
21	0 to 3.2
22	0 to 3.2
23	0 to 3.2
24	0 to 3.2
25	0 to 3.2
26	3.2
27	0
28	0 to 3.2
29	0 to 3.2
30	0 to 3.2
31	0 to 3.2
32	0 to 3.2
33	0 to 3.2
34	0 to 3.2
35	0 to 3.2
36	0 to 3.2
37	3.1
38	0 to 3.2
39	0 to 3.2
40	0 to 3.2
41	0 to 3.2
42	0 to 3.2
43	0 to 3.2
44	0 to 3.2
45	0 to 3.2
46	0
47	3.1
48	0 to 3.2

IC1022 (M51957BFP)

Pin No.	Voltage (V)
1	0
2	0
3	0
4	0
5	1.3
6	3.2
7	3.2
8	0

IC1204 (HD6417709AF100B)

Pin No.	Voltage (V)	Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	3.2	91	3.2	181	0
2	0	92	3.2	182	0 to 3.2
3	1.8	93	0 to 3.3	183	3.2
4	1.6	94	3.2	184	0 to 3.2
5	0	95	0	185	0 to 3.2
6	0	96	3.3	186	0 to 3.2
7	0	97	3.3	187	0 to 3.2
8	0	98	0 to 3.3	188	0 to 3.2
9	0	99	0 to 3.3	189	0 to 3.2
10	3.3	100	0 to 3.3	190	0 to 3.2
11	3.2	101	3.2	191	0 to 3.2
12	3.3	102	3.2	192	0 to 3.2
13	0 to 3.3	103	3.2	193	3.2
14	0	104	3.2	194	3.1
15	0	105	3.2	195	0
16	0	106	0 to 3.3	196	3.1
17	3.3	107	0 to 3.3	197	0
18	3.3	108	0 to 3.3	198	0
19	0	109	0	199	3.0
20	0	110	0	200	3.0
21	3.3	111	3.2	201	3.2
22	0	112	0	202	3.2
23	0	113	0	203	3.1
24	0	114	0 to 3.3	204	0
25	0	115	0 to 3.3	205	3.2
26	0	116	3.2	206	0.7
27	0	117	3.2	207	0.7
28	0	118	0	208	0
29	1.8	119	0		
30	0	120	3.3		
31	0	121	3.2		
32	0	122	3.2		
33	0	123	3.2		
34	0 to 3.3	124	3.2		
35	3.2	125	3.2		
36	0 to 3.3	126	3.1		
37	0 to 3.3	127	3		
38	0 to 3.3	128	3.2		
39	0 to 3.3	129	2.8		
40	0 to 3.3	130	0		
41	0 to 3.3	131	0		
42	0 to 3.3	132	0		
43	0 to 3.3	133	3.2		
44	0 to 3.3	134	1.8		
45	0	135	3.2		
46	0 to 3.3	136	3.0		
47	3.3	137	3.0		
48	0 to 3.3	138	3.0		
49	0 to 3.3	139	3.0		
50	0 to 3.3	140	3.1		
51	0 to 3.3	141	0		
52	0 to 3.3	142	3.0		
53	0 to 3.3	143	0		
54	0 to 3.3	144	0		
55	0 to 3.3	145	1.8		
56	0 to 3.3	146	0.7		
57	0	147	0		
58	0 to 3.3	148	0		
59	3.3	149	0.7		
60	0 to 3.3	150	1.8		
61	0 to 3.3	151	1.9		
62	0 to 3.3	152	0		
63	0 to 3.3	153	0		
64	0 to 3.3	154	1.8		
65	0 to 3.3	155	1.6		
66	0 to 3.3	156	1.1		
67	0 to 3.3	157	3.2		
68	0 to 3.3	158	3.2		
69	0	159	3.2		
70	0 to 3.3	160	0 to 3.2		
71	3.3	161	0		
72	0 to 3.3	162	0 to 3.2		
73	0 to 3.3	163	3.2		
74	0 to 3.3	164	0		
75	0 to 3.3	165	3.2		
76	0 to 3.3	166	3.2		
77	0 to 3.3	167	0 to 3.2		
78	0 to 3.3	168	0 to 3.2		
79	0	169	0		
80	0	170	0		
81	1.8	171	3.2		
82	0 to 3.3	172	3.2		
83	0	173	0		
84	0 to 3.3	174	0 to 3.2		
85	3.3	175	1.8		
86	0 to 3.3	176	3.0		
87	3.2	177	0 to 3.2		
88	0 to 3.3	178	0 to 3.2		
89	0 to 3.3	179	0 to 3.2		
90	0 to 3.3	180	0 to 3.2		

IC1408 (K4S281632)

Pin No.	Voltage (V)
1	3.2
2	0 to 3.3
3	3.2
4	0 to 3.3
5	0 to 3.3
6	0
7	0 to 3.3
8	0 to 3.3
9	3.2
10	0 to 3.3
11	0 to 3.3
12	0
13	0 to 3.3
14	3.2
15	0 to 3.3
16	0 to 3.3
17	0 to 3.3
18	0 to 3.3
19	0 to 3.3
20	0 to 3.3
21	0 to 3.3
22	0 to 3.3
23	0 to 3.3
24	0 to 3.3
25	0 to 3.3
26	0 to 3.3
27	3.2
28	0
29	0 to 3.3
30	0 to 3.3
31	0 to 3.3
32	0 to 3.3
33	0 to 3.3
34	0 to 3.3
35	0 to 3.3
36	0
37	3.2
38	0 to 3.3
39	0 to 3.3
40	0.7
41	0
42	0 to 3.3
43	3.2
44	0 to 3.3
45	0 to 3.3
46	0
47	0 to 3.3
48	0 to 3.3
49	3.2
50	0.7
51	0 to 3.3
52	0
53	0 to 3.3
54	0

■ Voltage (2/3)

A 2/3 MAIN ASSY

IC1402 (XCA56367PV150)

Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	1.1	91	1.8
2	0.7	92	0
3	0.6	93	0
4	0 to 3.2	94	0
5	0 to 3.2	95	3.2
6	0 to 3.2	96	0
7	0 to 3.2	97	0
8	3.2	98	0
9	0	99	0
10	0 to 3.2	100	0
11	0 to 3.2	101	0
12	0 to 3.2	102	0
13	0 to 3.2	103	3.2
14	0	104	0
15	0 to 3.2	105	0
16	0 to 3.2	106	0
17	0 to 3.2	107	0
18	1.8	108	0
19	0	109	0
20	3.3	110	0
21	0 to 3.2	111	3.2
22	0 to 3.2	112	0
23	0 to 3.2	113	0
24	0	114	0.6
25	3.2	115	0.6
26	0	116	0
27	0	117	0
28	0.7	118	0.6
29	0	119	0.7
30	3.2	120	0.7
31	3.2	121	0
32	0.8	122	0
33	0 to 3.2	123	0
34	0 to 3.2	124	0
35	0 to 3.2	125	0
36	0 to 3.2	126	0
37	0 to 3.2	127	0
38	3.2	128	0
39	0	129	3.2
40	0 to 3.2	130	0
41	0 to 3.2	131	0
42	0 to 3.2	132	0
43	0 to 3.2	133	0
44	3.2	134	2.6
45	1.8	135	0
46	0.9	136	0
47	0	137	0
48	0 to 3.2	138	1 to 3.2
49	3.2	139	0
50	0 to 3.2	140	0
51	0.9	141	0
52	0.7	142	0
53	3.2	143	0
54	0 to 3.2	144	0.6
55	0		
56	0 to 3.4		
57	1.8		
58	0		
59	0 to 3.2		
60	0 to 3.2		
61	0.7		
62	0		
63	3.2		
64	3.1		
65	3.2		
66	0		
67	0.7		
68	0.7		
69	0.7		
70	0.7		
71	0		
72	0.7		
73	0		
74	3.2		
75	0		
76	0		
77	0		
78	0		
79	0		
80	3.2		
81	0		
82	0		
83	0		
84	0		
85	0		
86	3.2		
87	0		
88	0		
89	0		
90	0		

IC1409 (XC2S30-5TQ144C)

Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	3.2	91	0
2	2.4	92	2.5
3	3.1	93	0
4	0.4 to 2.1	94	3.2
5	0 to 3.1	95	0
6	0 to 3.1	96	0 to 3.2
7	0 to 3.1	97	2.5
8	0	98	0
9	0	99	0 to 3.2
10	0.4 to 2.9	100	3.2
11	0 to 3.1	101	0
12	0 to 3.1	102	3.2
13	0 to 3.1	103	0 to 3.2
14	2.5	104	0.6
15	0 to 3.1	105	0.6
16	0.7	106	0
17	0.6	107	3.2
18	0.6	108	3.2
19	0.6	109	2.5
20	0.6	110	0
21	3.2	111	2.5
22	0.6	112	0 to 3.2
23	0 to 4.9	113	0 to 3.2
24	2.5	114	0 to 3.2
25	0.6	115	0 to 3.2
26	0.6	116	0
27	0	117	0 to 3.2
28	0 to 4.9	118	0 to 3.2
29	0 to 4.9	119	0
30	11 to 3.8	120	0 to 3.2
31	0 to 4.9	121	0 to 3.2
32	2.4	122	0 to 3.2
33	0.6	123	0 to 3.2
34	0.6	124	0 to 3.2
35	3.2	125	0.6
36	0.6	126	3.2
37	3.2	127	0
38	0	128	0.7
39	0	129	0.7
40	0 to 3.0	130	0 to 3.2
41	0 to 3.2	131	0 to 3.2
42	0	132	0 to 4.9
43	0 to 3.2	133	0.7
44	0 to 3.2	134	0
45	0	135	0
46	0 to 3.2	136	0 to 4.9
47	0 to 3.2	137	0 to 4.9
48	0 to 3.2	138	0 to 4.9
49	0 to 3.2	139	0 to 4.9
50	0 to 3.2	140	1 to 3.8
51	0 to 3.2	141	3.2
52	0	142	2.4
53	3.2	143	0
54	0 to 3.2	144	3.2
55	2.5		
56	0 to 3.2		
57	0 to 3.2		
58	0 to 3.2		
59	0 to 3.2		
60	0 to 3.2		
61	0		
62	0		
63	0 to 3.0		
64	0		
65	0 to 3.0		
66	0 to 3.1		
67	2.9		
68	2.9		
69	3.2		
70	3.2		
71	3.2		
72	3.2		
73	0		
74	0 to 3.1		
75	0 to 3.1		
76	0 to 3.1		
77	0.6		
78	0 to 3.1		
79	0 to 3.1		
80	0 to 3.1		
81	0		
82	2.5		
83	0.6		
84	0		
85	0		
86	3.2		
87	0		
88	0.7 to 2.6		
89	0		
90	0.6		

IC1414 (BA7042)

Pin No.	Voltage (V)
1	0
2	2.3
3	0
4	0
5	2.5 to 4.5
6	5.0
7	2.6
8	2.6

■ Voltage (3/3)

A 3/3 MAIN ASSY

IC1005 (TC9495F)

Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	4.4	91	0 to 5.0
2	0	92	0 to 5.0
3	5.0	93	0 to 5.0
4	0	94	5.0
5	0 to 4.9	95	0
6	0	96	5.0
7	0.3 to 4.4	97	0 to 5.0
8	0 to 4.9	98	4.7
9	0	99	4.7
10	0	100	5.0
11	0		
12	5.0		
13	0 to 4.2		
14	5.0		
15	0		
16	0 to 4.9		
17	0 to 4.9		
18	0 to 4.9		
19	0.3 to 4.2		
20	0 to 4.7		
21	0 to 4.9		
22	0 to 4.5		
23	4.9		
24	0		
25	4.2		
26	2.1		
27	0 to 4.9		
28	5.0		
29	0		
30	4.2		
31	2.1		
32	2.0		
33	2.1		
34	2.1		
35	1.3		
36	0		
37	2.1		
38	1.6 to 2.6		
39	5.0		
40	3.0		
41	3.1		
42	2.5 to 2.9		
43	2.5 to 2.9		
44	2.5		
45	2.1		
46	1.4 to 2.9		
47	0 to 4.1		
48	0.7 to 2.2		
49	1.4 to 3.4		
50	2.1		
51	0.4 to 2.1		
52	2.1		
53	0.4 to 2.1		
54	2.1		
55	0 to 4.2		
56	4.2		
57	2.1		
58	0 to 5.0		
59	5.0		
60	5.0		
61	0		
62	5.0		
63	0		
64	5.0		
65	0		
66	0		
67	0 to 5.0		
68	4.9		
69	4.9		
70	4.9		
71	0		
72	0		
73	0		
74	0		
75	5.0		
76	5.0		
77	0		
78	1.0 to 3.0		
79	0.5 to 4.5		
80	5.0		
81	0		
82	0.4		
83	0		
84	0		
85	0.4		
86	0		
87	4.8		
88	4.8		
89	4.8		
90	0 to 5.0		

IC1010 (TA2153FN)

Pin No.	Voltage (V)
1	4.9
2	1.8
3	2.1
4	2.1
5	2.1
6	2.0
7	2.1
8	0
9	4.3
10	0
11	2.1
12	4.1
13	2.1
14	2.1
15	1.2
16	2.1
17	2.1
18	0.0
19	2.1
20	1.1
21	1.8
22	1.1
23	0.5
24	2.0
25	2.1
26	0
27	2.2
28	1.0 to 2.1
29	0
30	2.1

IC1011(LA6562)

Pin No.	Voltage (V)
1	4.3
2	4.3
3	7.3
4	3.3
5	3.3
6	3.4
7	3.2
8	2.5
9	3.5
10	0
11	3.7
12	3.4
13	3.8
14	3.7
15	7.3
16	2.0
17	2.0
18	2.0
19	2.0
20	2.0
21	2.0
22	2.0
23	2.0
24	2.0
25	1.0
26	0.6
27	1.0
28	2.0
29	0
30	2.0
31	2.0
32	2.0
33	2.0
34	2.5
35	2.5
36	2.0
37	0
38	3.2

E JACB ASSY

IC201 (PE8001)

Pin No.	Voltage (V)
1	0 to 3.1
2	0 to 3.1
3	0 to 3.1
4	0.3 to 4.4
5	0.5 to 2.7
6	0.8 to 4.8
7	0
8	5.0
9	5.0
10	0
11	0 to 2.5
12	0
13	2.5
14	0
15	5.0
16	2.2
17	0.7
18	0
19	0
20	5.0
21	3.0
22	0
23	0
24	0
25	0 to 4.9
26	0
27	0.5
28	3.2

IC211 (NJM2360M)

Pin No.	Voltage (V)
1	7.1
2	0 to 5.6
3	-7.5
4	-7.9
5	0.5
6	6.9
7	6.9
8	6.9

I CNTA ASSY

IC301 (PD5764A)

Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	0	51	-31 to 5.0
2	0	52	-31 to 5.0
3	0	53	-31 to 5.0
4	0	54	-31 to 5.0
5	5.0	55	-31 to 5.0
6	5.0	56	-31 to 5.0
7	0	57	-31 to 5.0
8	0	58	-31 to 5.0
9	0	59	-31 to 5.0
10	0 to 5.0	60	-31 to 5.0
11	0 to 5.0	61	-31 to 5.0
12	0 to 5.0	62	-31 to 5.0
13	0 to 5.0	63	-31 to 5.0
14	0 to 5.0	64	-31 to 5.0
15	0 to 5.0	65	-31 to 5.0
16	0 to 5.0	66	-31 to 5.0
17	0	67	-31 to 5.0
18	5.0	68	-31 to 5.0
19	0 to 5.0	69	-31 to 5.0
20	0 to 5.0	70	-31 to 5.0
21	0	71	-31 to 5.0
22	0 to 4.3	72	-31 to 5.0
23	0 to 5.0	73	-31
24	5.0	74	-31
25	0	75	-31
26	0	76	-31 to 5.0
27	0	77	-31 to 5.0
28	0	78	-31 to 5.0
29	0 to 5.0	79	-31 to 5.0
30	0 to 5.0	80	-31 to 5.0
31	0 to 5.0	81	-31 to 5.0
32	0 to 5.0	82	-31 to 5.0
33	5.0	83	-31 to 5.0
34	5.0	84	-31 to 5.0
35	5.0	85	-31 to 5.0
36	5.0	86	-31 to 5.0
37	-31 to 5.0	87	-31 to 5.0
38	-31 to 5.0	88	-31 to 5.0
39	-31 to 5.0	89	-31
40	-31 to 5.0	90	0 to 5.0
41	-31 to 5.0	91	0 to 5.0
42	-31 to 5.0	92	0 to 5.0
43	-31 to 5.0	93	1.3
44	-31 to 5.0	94	0 to 5.0
45	-31 to 5.0	95	0 to 5.0
46	-31 to 5.0	96	0
47	-31 to 5.0	97	0
48	-31 to 5.0	98	5.0
49	-31 to 5.0	99	2.5
50	-31 to 5.0	100	0 to 5.0

K CNTB ASSY

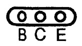
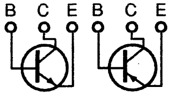
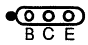
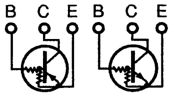
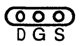
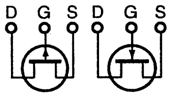
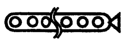
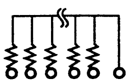
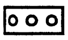
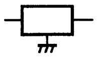
IC501 (PD5764A)

Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	5.0	51	-31 to 5.0
2	5.0	52	-31 to 5.0
3	5.0	53	-31 to 5.0
4	5.0	54	-31 to 5.0
5	5.0	55	-31 to 5.0
6	5.0	56	-31 to 5.0
7	0 to 5.0	57	-31 to 5.0
8	0 to 5.0	58	-31 to 5.0
9	0	59	-31 to 5.0
10	0 to 5.0	60	-31 to 5.0
11	0 to 5.0	61	-31 to 5.0
12	0 to 5.0	62	-31 to 5.0
13	0 to 5.0	63	-31 to 5.0
14	0 to 5.0	64	-31 to 5.0
15	0	65	-31 to 5.0
16	0	66	-31 to 5.0
17	0	67	-31 to 5.0
18	5.0	68	-31 to 5.0
19	0	69	-31 to 5.0
20	0	70	-31 to 5.0
21	0	71	-31 to 5.0
22	0 to 4.0	72	-31 to 5.0
23	0 to 5.0	73	-31
24	0 to 5.0	74	-31
25	5.0	75	-31
26	0 to 5.0	76	-31 to 5.0
27	0 to 5.0	77	-31 to 5.0
28	0 to 5.0	78	-31 to 5.0
29	0 to 5.0	79	-31 to 5.0
30	0 to 5.0	80	-31 to 5.0
31	0 to 5.0	81	-31 to 5.0
32	0 to 5.0	82	-31 to 5.0
33	5.0	83	-31 to 5.0
34	5.0	84	-31 to 5.0
35	0 to 5.0	85	-31 to 5.0
36	0 to 5.0	86	-31 to 5.0
37	-31 to 5.0	87	-31 to 5.0
38	-31 to 5.0	88	-31 to 5.0
39	-31 to 5.0	89	-31
40	-31 to 5.0	90	0 to 5.0
41	-31 to 5.0	91	0 to 5.0
42	-31 to 5.0	92	0 to 5.0
43	-31 to 5.0	93	5.0
44	-31 to 5.0	94	0 to 5.0
45	-31 to 5.0	95	0 to 5.0
46	-31 to 5.0	96	5.0
47	-31 to 5.0	97	0
48	-31 to 5.0	98	5.0
49	-31 to 5.0	99	2.5
50	-31 to 5.0	100	0 to 5.0

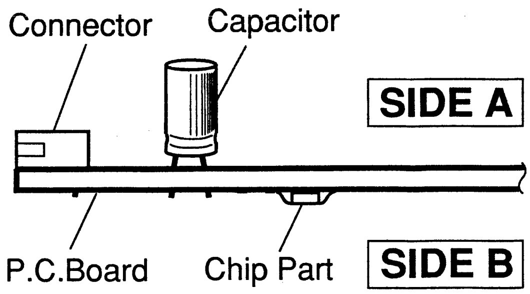
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

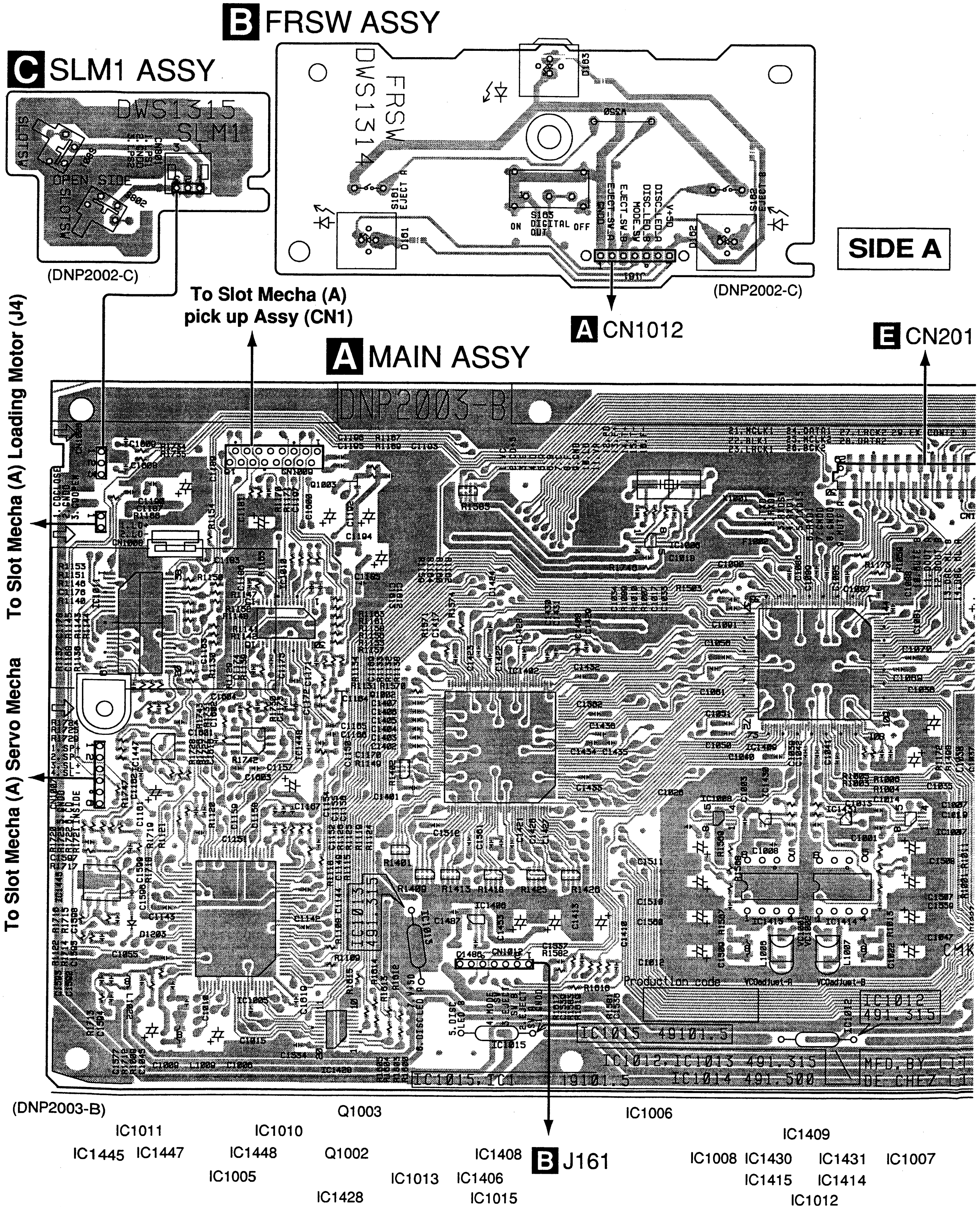
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

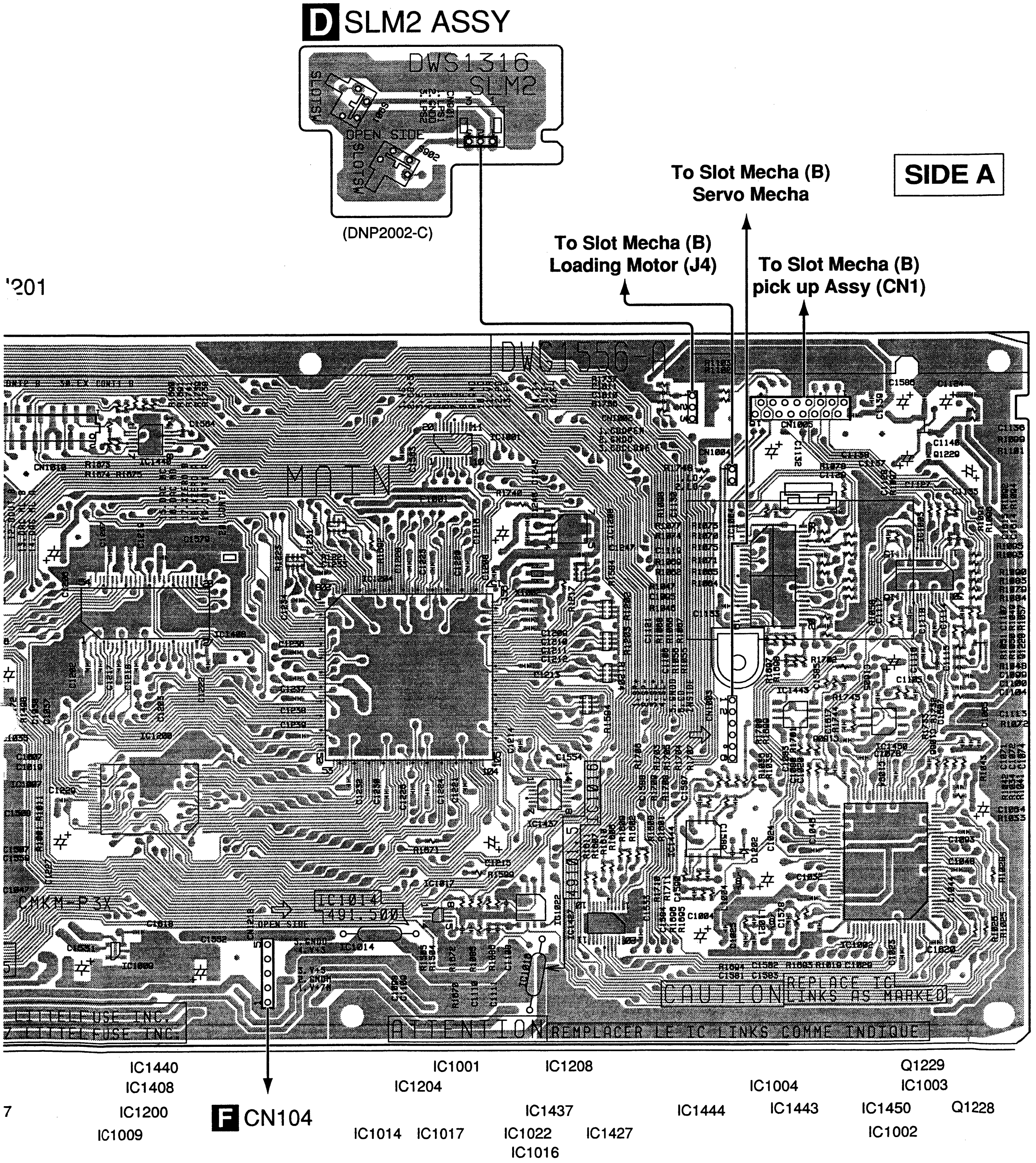
Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



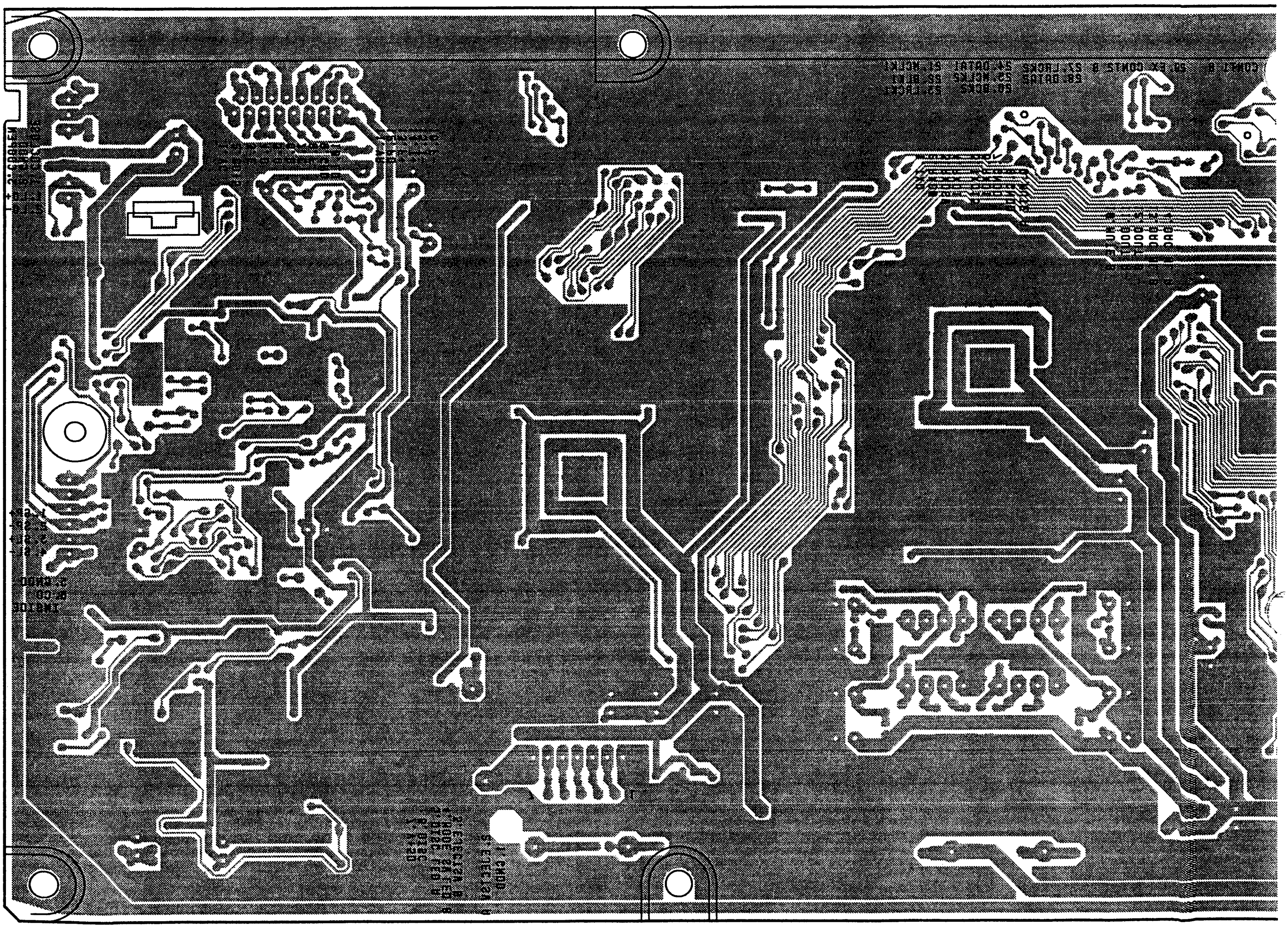
4.1 MAIN, FRSW, SLM1 and SLM2 ASSYS


B FRSW ASSY
C SLM1 ASSY
DWS1315
SLM1
OPEN SIDE
FRSW
DWS1314
S161
S162
S165 DIGITAL OUT
ON
OFF
D161
D162
D163
SIDE A
(DNP2002-C)
(DNP2002-C)
To Slot Mecha (A) pick up Assy (CN1)
A CN1012
E CN201
A MAIN ASSY
DNP2003-B
To Slot Mecha (A) Loading Motor (J4)
To Slot Mecha (A) Servo Mecha
Production code
IC1012 491.315
IC1015 49101.5
IC1012,IC1013 491.315
IC1014 491.500
IC1015,IC1016 49101.5
MFD. BY
(DNP2003-B)
Q1003
IC1006
IC1011
IC1010
IC1409
IC1445
IC1447
IC1448
Q1002
IC1408
B J161
IC1008
IC1430
IC1431
IC1007
IC1005
IC1013
IC1406
IC1415
IC1414
IC1428
IC1015
IC1012

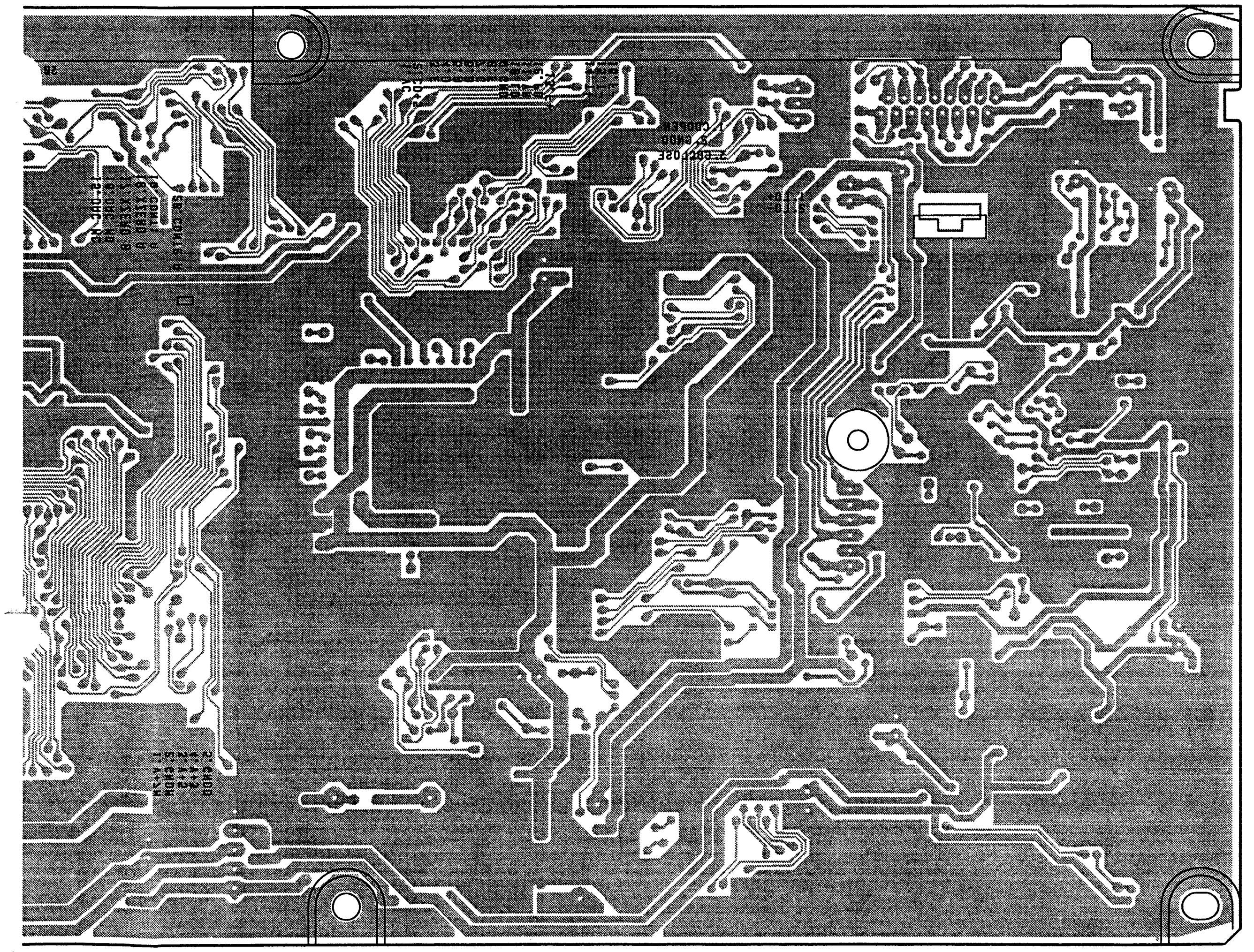

D SLM2 ASSY
DWS1316
SLM2
OPEN SIDE
S901
S902
(DNP2002-C)
To Slot Mecha (B)
Servo Mecha
SIDE A
To Slot Mecha (B)
Loading Motor (J4)
To Slot Mecha (B)
pick up Assy (CN1)
'201
DWS1556-A
MAIN
CN1005
CN1004
CN1003
CN1002
CMKM-P3X
IC1014
491.500
OPEN SIDE
CAUTION
REPLACE IC LINKS AS MARKED
ATTENTION
REMPLACER LE IC LINKS COMME INDIQUE
LITTELFUSE INC.
LITTELFUSE INC.
IC1440
IC1408
IC1200
IC1009
7
F CN104
IC1001
IC1204
IC1014
IC1017
IC1208
IC1437
IC1022
IC1016
IC1427
IC1444
IC1004
IC1443
Q1229
IC1003
IC1450
IC1002
Q1228

SIDE B

A MAIN ASSY

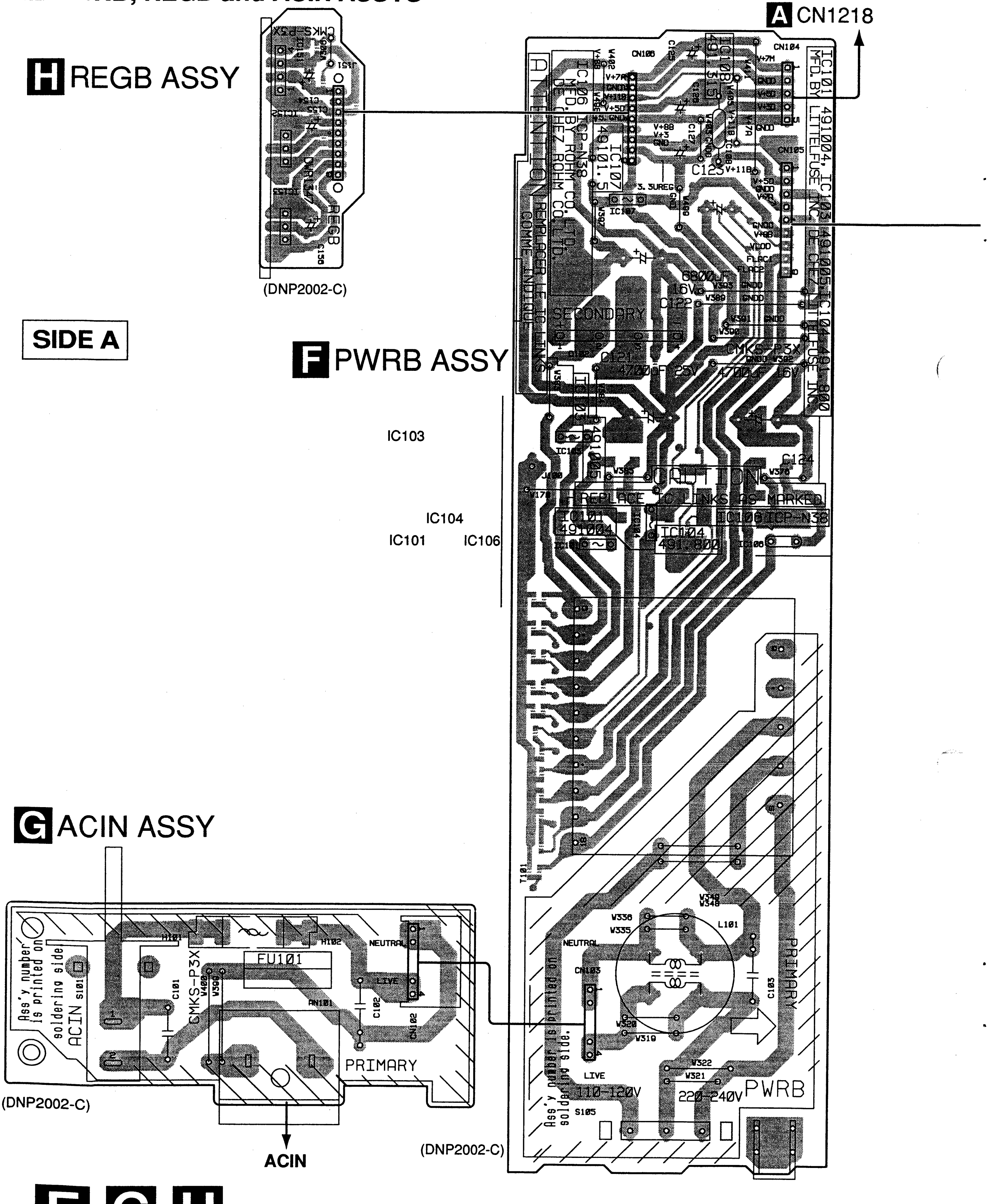


SIDE B



(DNP2003)

4.2 PWRB, REGB and ACIN ASSYS



H REGB ASSY

(DNP2002-C)

SIDE A

F PWRB ASSY

G ACIN ASSY

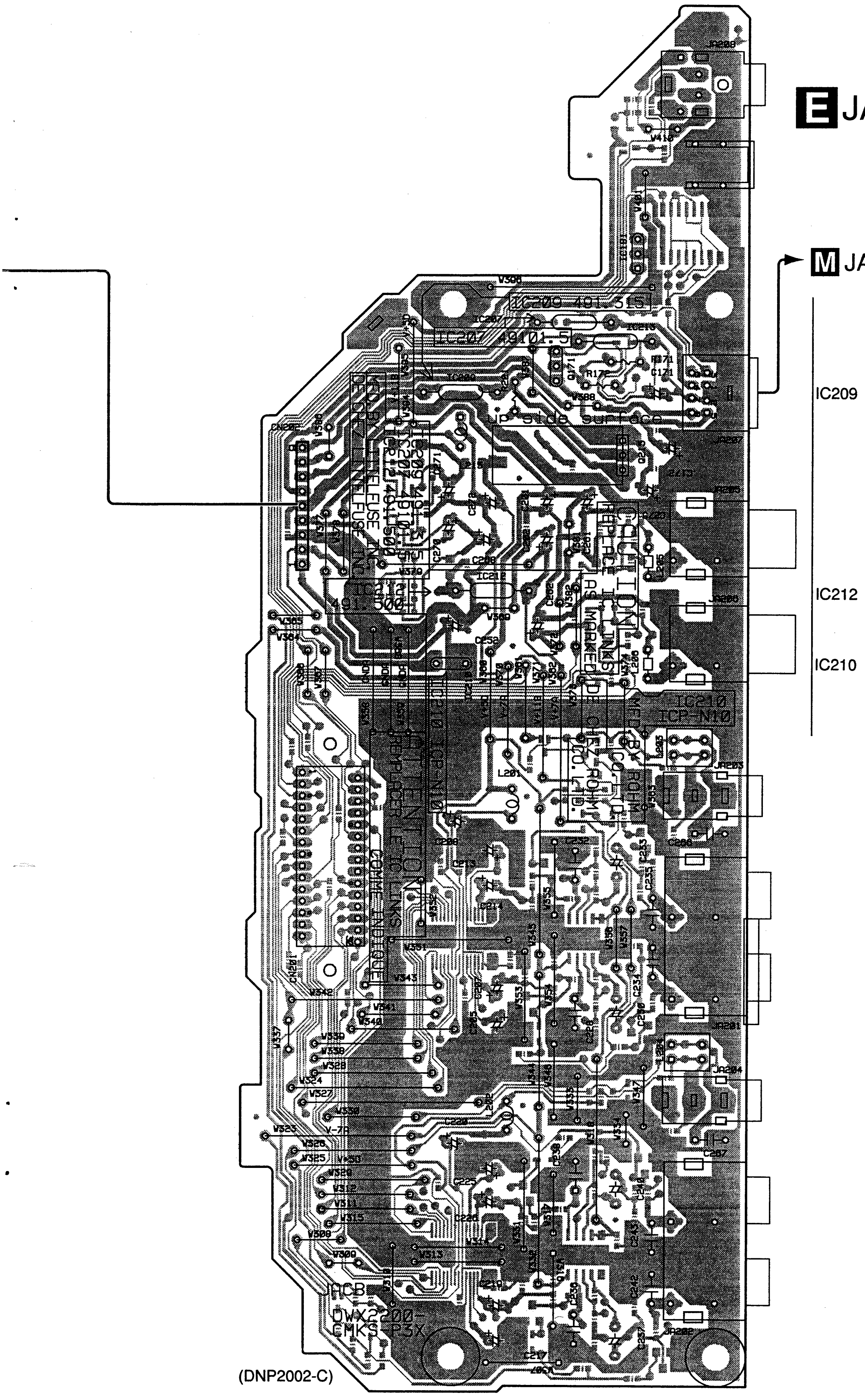
(DNP2002-C)

(DNP2002-C)

A CN1218
CMKS-P3X
REGB
J151
CN106
CN104
IC101 491004, IC103 491005, IC104 491.800
MFD. BY LITTELFUSE INC.
IC106 ICP-N38
MFD. BY ROHM CO., LTD.
IC107 49101.5
IC108 491.315
CN105
3.3UREG
6800µF 16V
C122
C121 4700µF 25V
4700µF 16V
C123
C124
SECONDARY
CAUTION
REPLACE IC LINKS AS MARKED
IC101 491004
IC104 491.800
IC106 ICP-N38
IC103
IC104
IC101
IC106
T101
L101
NEUTRAL
LIVE
CN103
C103
PRIMARY
110-120V
220-240V
S105
PWRB
Ass'y number is printed on soldering side.
ACIN
S101
H101
H102
FU101
C101
C102
CN102
PRIMARY
ACIN

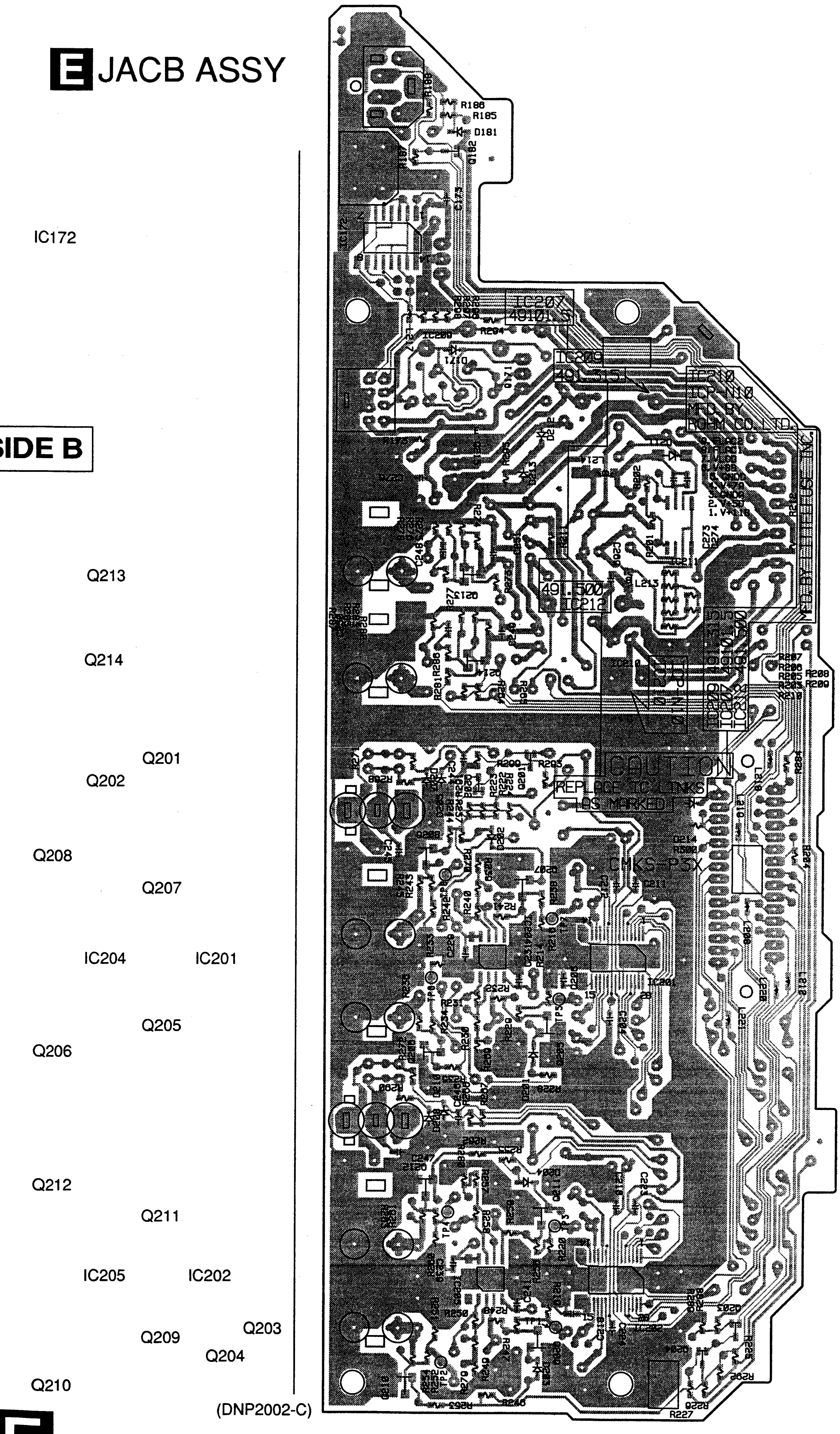
E JACB ASSY

SIDE A


M JA701
IC207
IC213
Q171
IC209
Q215
IC212
IC210
(DNP2002-C)

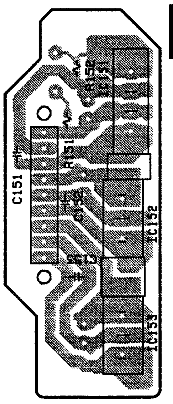
E JACB ASSY

SIDE B


IC172
Q213
Q214
Q201
Q202
Q208
Q207
IC204
IC201
Q205
Q206
Q212
Q211
IC205
IC202
Q203
Q209
Q204
Q210
R186
R185
D181
IC207
49101S
IC209
491.515
IC210
ICP-N10
MFD.BY
ROHM CO.,LTD.
491.500
IC212
CAUTION
REPLACE IC LINKS
AS MARKED
CMKS-P3X
R207
R206
R208
R205
R209
R210
R227

(DNP2002-C)

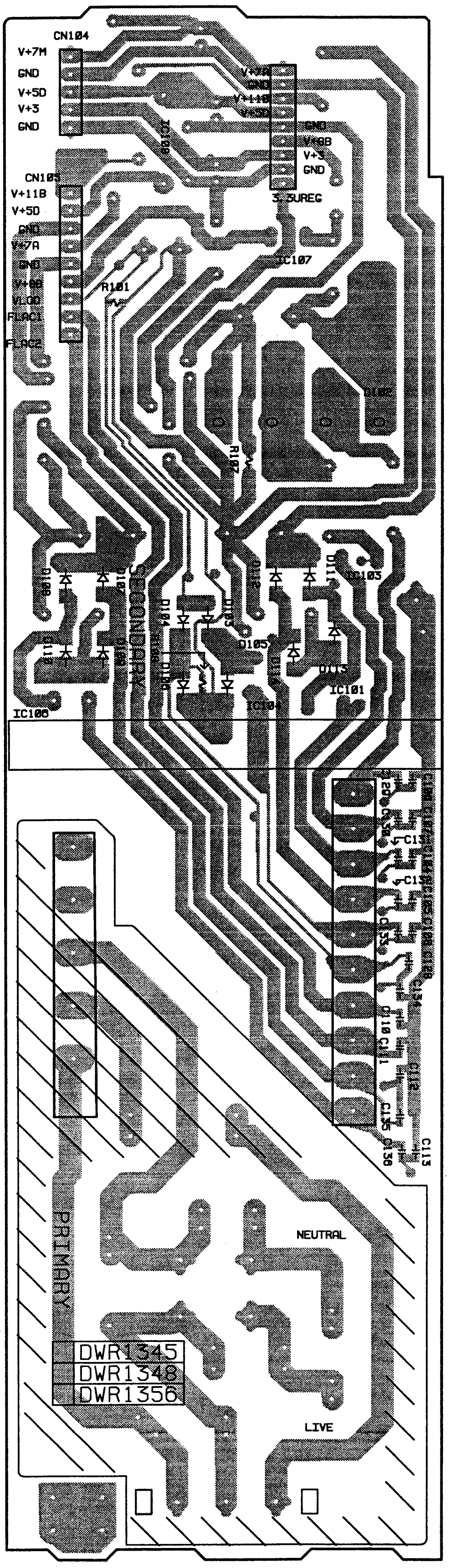
H REGB ASSY


IC151
IC152
IC153
C151
R151
C152

(DNP2002-C)

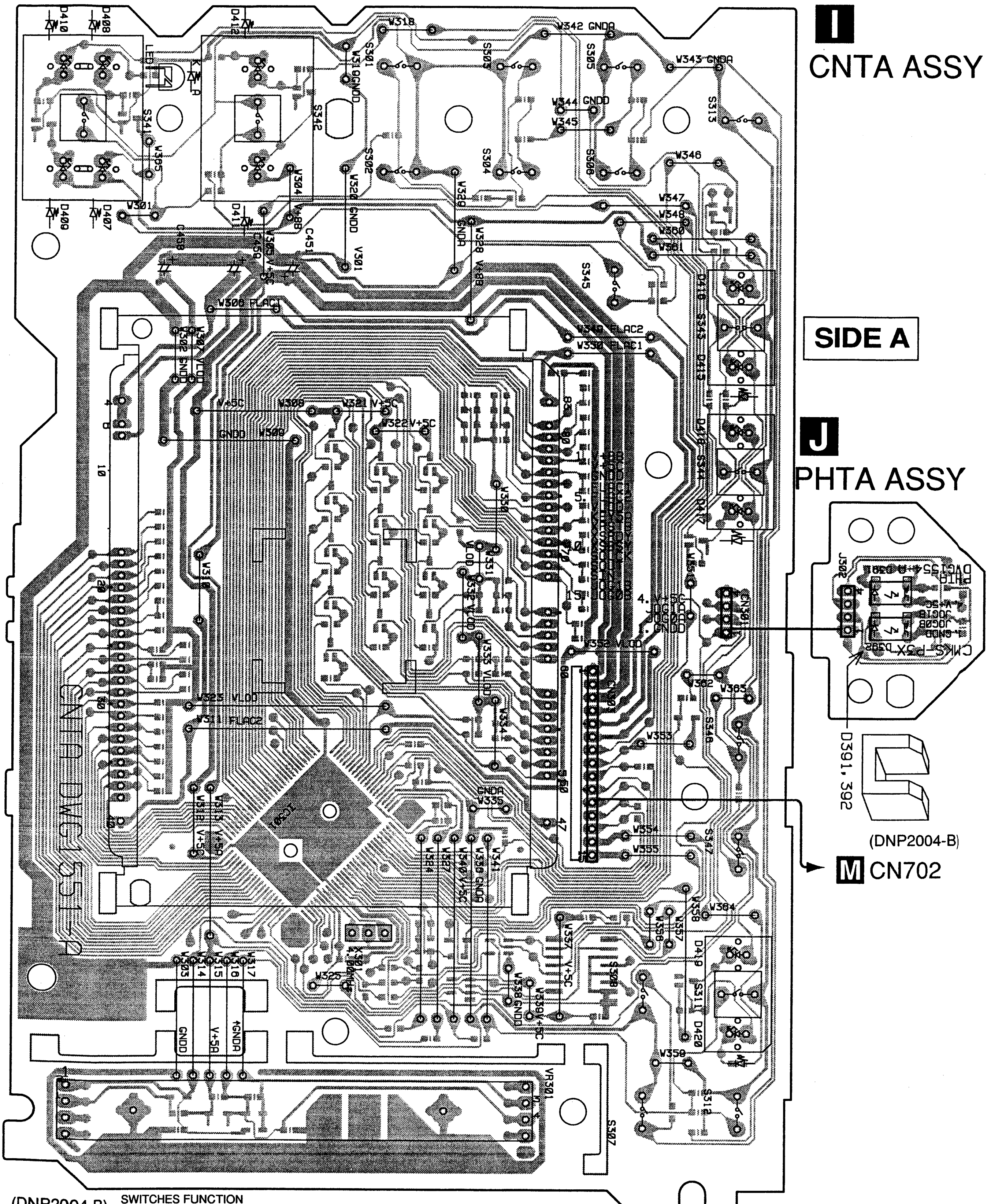
SIDE B

F PWRB ASSY


CN104
V+7M
GND
V+5D
V+3
GND
V+7A
V+11B
V+5D
GND
V+8B
V+3
GND
3.3UREG
IC108
CN105
V+11B
V+5D
GND
V+7A
GND
V+8B
VLOD
FLAC1
FLAC2
R101
IC107
R102
D102
D108
D107
D112
D111
IC103
D104
D103
D105
D110
D109
D106
IC101
IC106
IC104
SECONDARY
PRIMARY
NEUTRAL
LIVE
DWR1345
DWR1348
DWR1356

(DNP2002-C)

4.3 CNTA and PHTA ASSYS


I
CNTA ASSY
SIDE A
J
PHTA ASSY
D391, 392
(DNP2004-B)
M CN702
CNTA DWG1551-A
S301
S302
S303
S304
S305
S306
S313
S341
S342
S345
S343
S344
S346
S347
S307
S308
S311
S312
VR301
CN301
J302
IC301
X301
W318
W342 GNDA
W343 GNDA
W344 GNDD
W345
W346
W347
W301
W306 FLAG1
W349 FLAG2
W330 FLAG1
W323 V.DD
W311 FLAG2
W325
W350
W364
GNDD
V+5A
+GNDA
D407
D408
D409
D410
D411
D412
D413
D414
D415
D416
D417
D419
D420
LED

(DNP2004-B)

SWITCHES FUNCTION
S301 : ◀◀
S302 : ▶▶
S303 : |◀◀
S304 : ▶▶|
S305 : AUTO CUE/ TIME MODE
S306 : TEXT/ WAVE

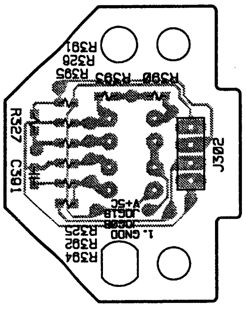
S307 : PITCH BEND [+]
S308 : PITCH BEND [-]
S311 : MASTER TEMPO
S312 : TEMPO
S313 : ▲ (EJECT)
S341 : ▶/II

S342 : CUE
S343 : IN/REALTIME CUE
S344 : OUT/ OUT ADJ
S345 : JOG MODE
S346 : RELOOP/ EXIT
S347 : EMERGENCY LOOP

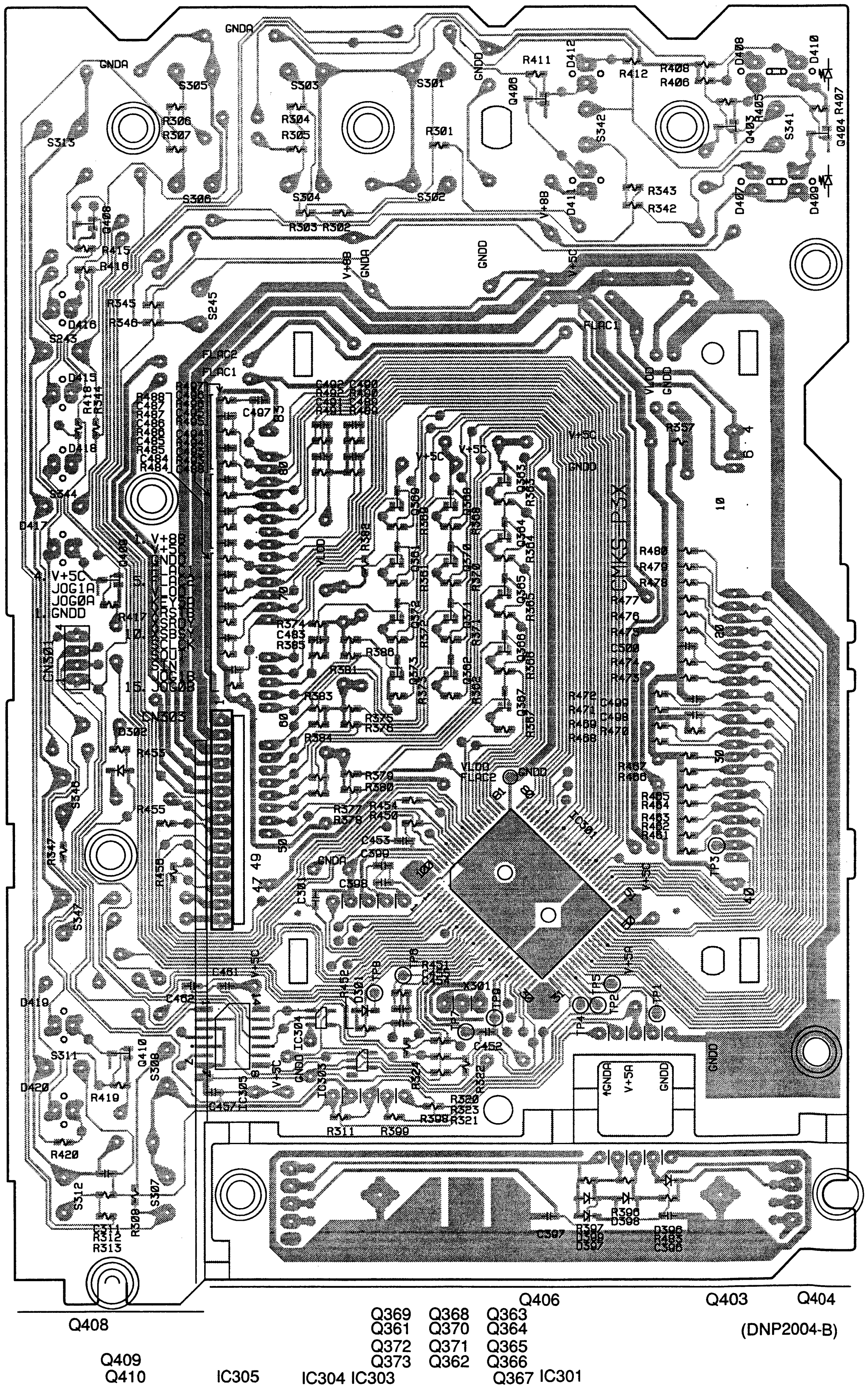
I
CNTA ASSY

SIDE B

J
PHTA ASSY


R391
R326
R395
R393
R390
R327
C301
J302
4. V+5C
JOG1B
JOG0B
1. GNDD
R325
R392
R394

(DNP2004-B)

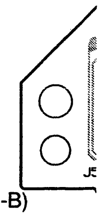

GNDA
S305
S303
S301
S313
R306
R307
R304
R305
R301
R411
D412
R412
R408
R406
D408
D410
Q406
S342
Q403
R405
S341
R407
Q404
S306
S304
S302
R343
R342
D407
D409
D411
V+8B
R303
R302
Q408
R415
R416
R345
R346
S245
V+8B
GNDA
GNDD
V+5C
D416
S243
FLAC1
FLAC2
D415
R418
R344
C492
C490
C493
C491
R401
R400
C497
R357
VLDD
V+5C
GNDD
D418
S344
D417
D408
4. V+5C
JOG1A
JOG0A
1. GNDD
CN301
R417
15. JOG0B
CN303
CMKS-P3X
R480
R479
R478
R477
R476
R475
C500
R474
R473
R472
R471
C499
R469
C498
R468
R470
R467
R466
R465
R464
R463
R462
R461
TP3
Q360
Q368
Q363
Q361
Q370
Q364
Q365
Q372
Q371
Q366
Q373
Q362
Q367
R374
C483
R385
R386
R381
R383
R375
R376
R384
R379
R380
R377
R378
R454
R450
C453
C399
C398
C301
D302
R455
S346
R347
S347
R456
VLDD
GNDD
FLAC2
IC301
C481
C482
V+5C
D301
TP8
TP0
R451
C455
C454
X301
TP9
TP4
TP5
TP2
TP1
V+5C
C452
D419
S311
Q410
S308
D420
R419
IC304
IC305
IC303
C457
R324
R322
R320
R323
R321
R398
R311
R399
GNDA
V+5A
GNDD
GNDD
R420
S312
S307
C311
R312
R313
R308
C397
R397
R396
D398
D397
D396
R395
C396
Q406
Q403
Q404
Q369
Q368
Q363
Q361
Q370
Q364
Q372
Q371
Q365
Q373
Q362
Q366
Q408
Q409
Q410
IC305
IC304
IC303
Q367
IC301

(DNP2004-B)

I J

4.4 CNTB and PHTB ASSYS

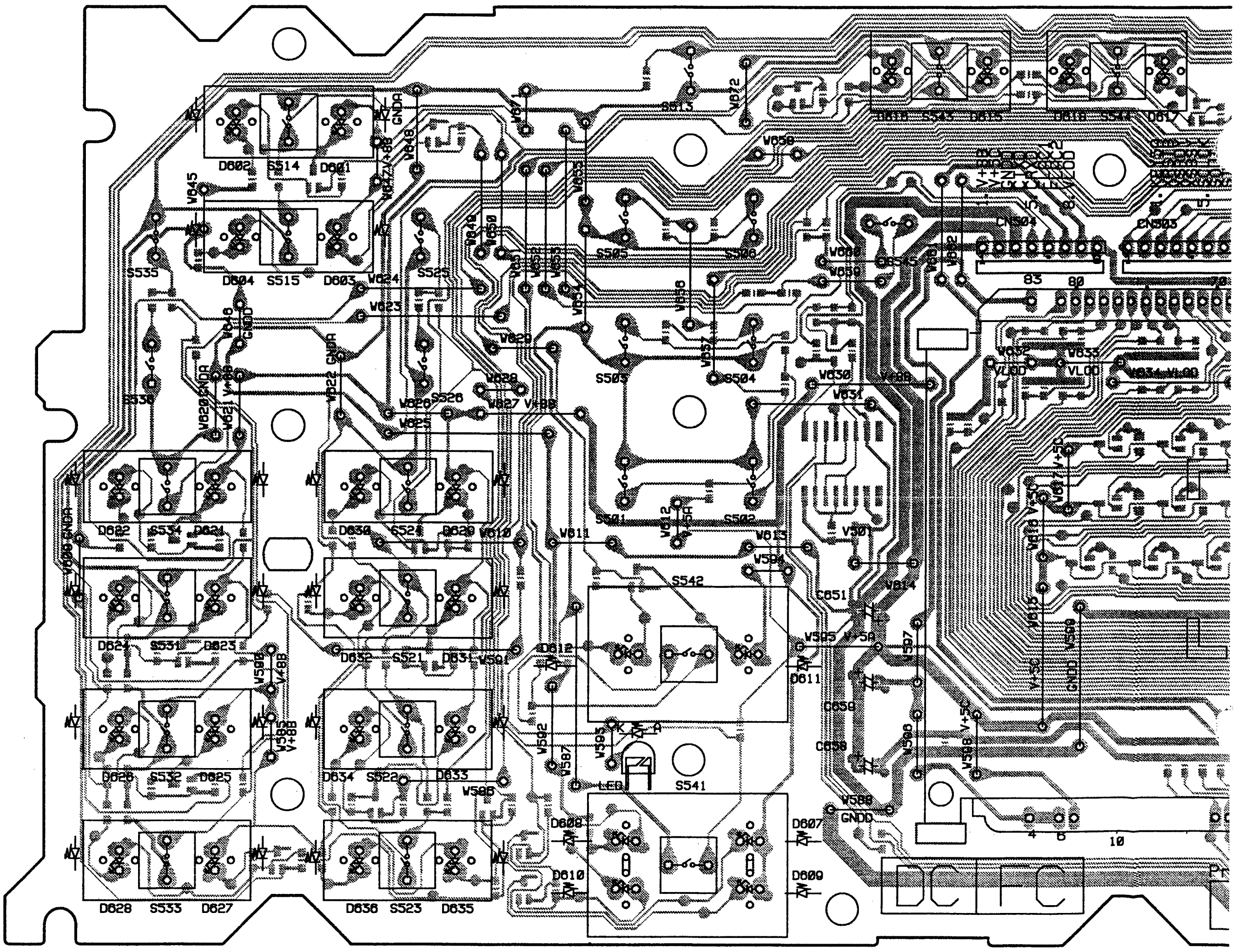
L PI



SIDE A

K CNTB ASSY

(DNP2002-B)


S513
W612
W658
D616 S543 D615
D618 S544 D617
D602 S514 D601
W645
W648
W649
W601
W655
S535
D604 S515 D603
W624
S525
W642
W650
W651
W652
W653
W654
S505
S506
W660
W659
S545
CN504
CN503
83
80
W623
W646
GNDD
W629
W656
W657
S503
S504
W630
W631
VLDD
W633
W634
S536
W620
W621
V+8B
W622
GNDA
W626
S526
W628
W627 V+8B
W625
D622 S534 D621
D630 S524 D629
W610
W611
S501
S502
W613
W632
V+5A
V501
W504
S542
C651
W614
W615
V+5C
W606
D624 S531 D623
D632 S521 D631
W501
D612
W505
D611
W503
W507
V+5C
GNDD
V+8B
W502
W587
W585
K
A
LED
S541
C659
C658
W506
W598
W588
GNDD
D626 S532 D625
D634 S522 D633
W586
D608
D607
4
6
10
D610
D609
D628 S533 D627
D636 S523 D635
DC
FC

SWITCHES FINCTION
S501 : ◀◀
S502 : ▶▶
S503 : |◀◀
S504 : ▶▶|
S505 : AUTO CUE/ TIME MODE
S506 : TEXT/ WAVE
S507 : PITCH BEND [+]
S508 : PITCH BEND [-]

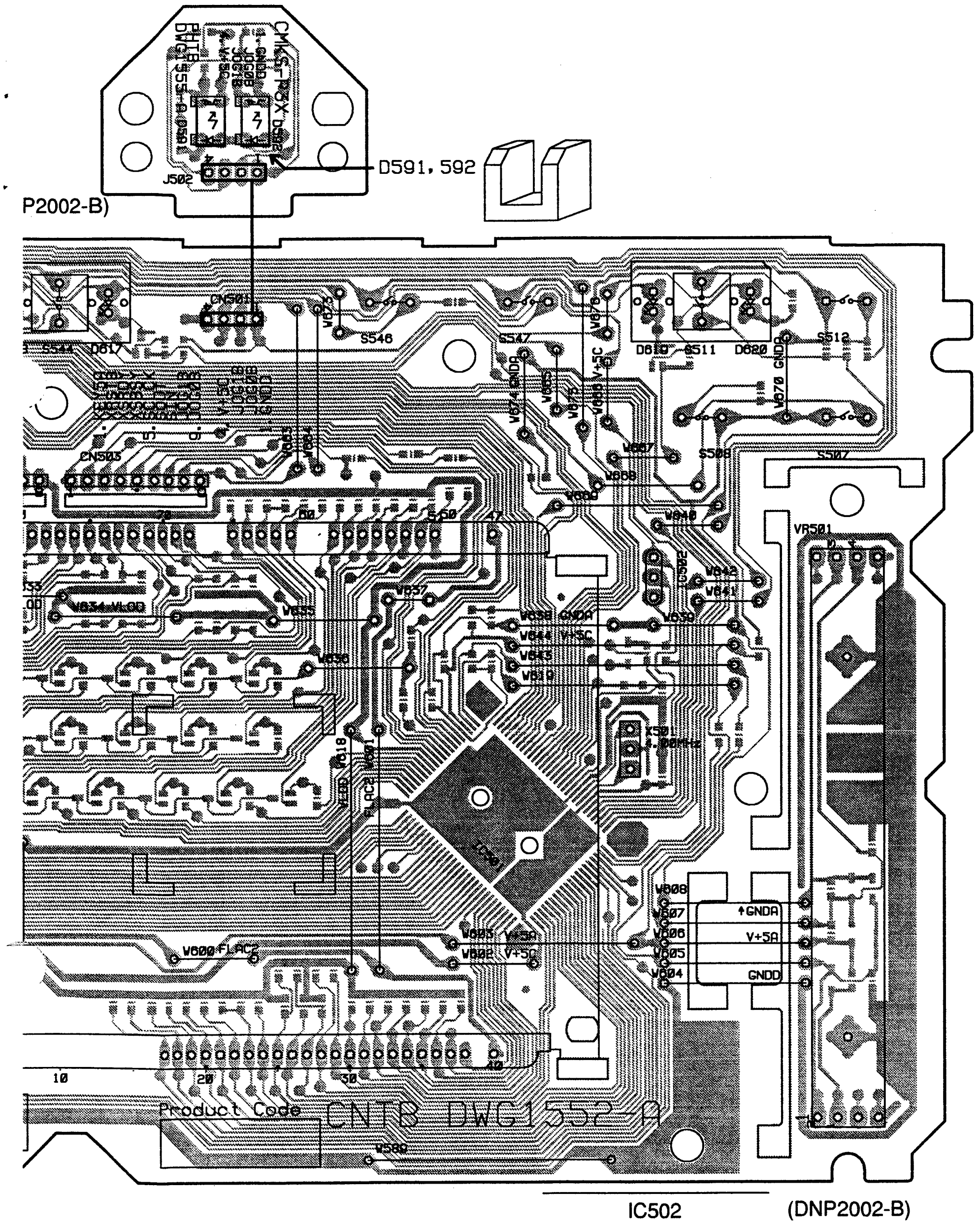
S511 : MASTER TEMPO
S512 : TEMPO RANGE
S513 : ⏏ (EJECT)
S514 : BPM SYNC
S515 : RELAY PLAY
S521 : HOT CUE 1 - B
S522 : HOT CUE 2 - B
S523 : HOT CUE 3 - B

S524 : HOT CUE REC - B
S525 : BPM AUTO - B
S526 : BPM TAP - B
S531 : HOT CUE 1 - A
S532 : HOT CUE 2 - A
S533 : HOT CUE 3 - A
S534 : HOT CUE REC - A
S535 : BPM AUTO - A

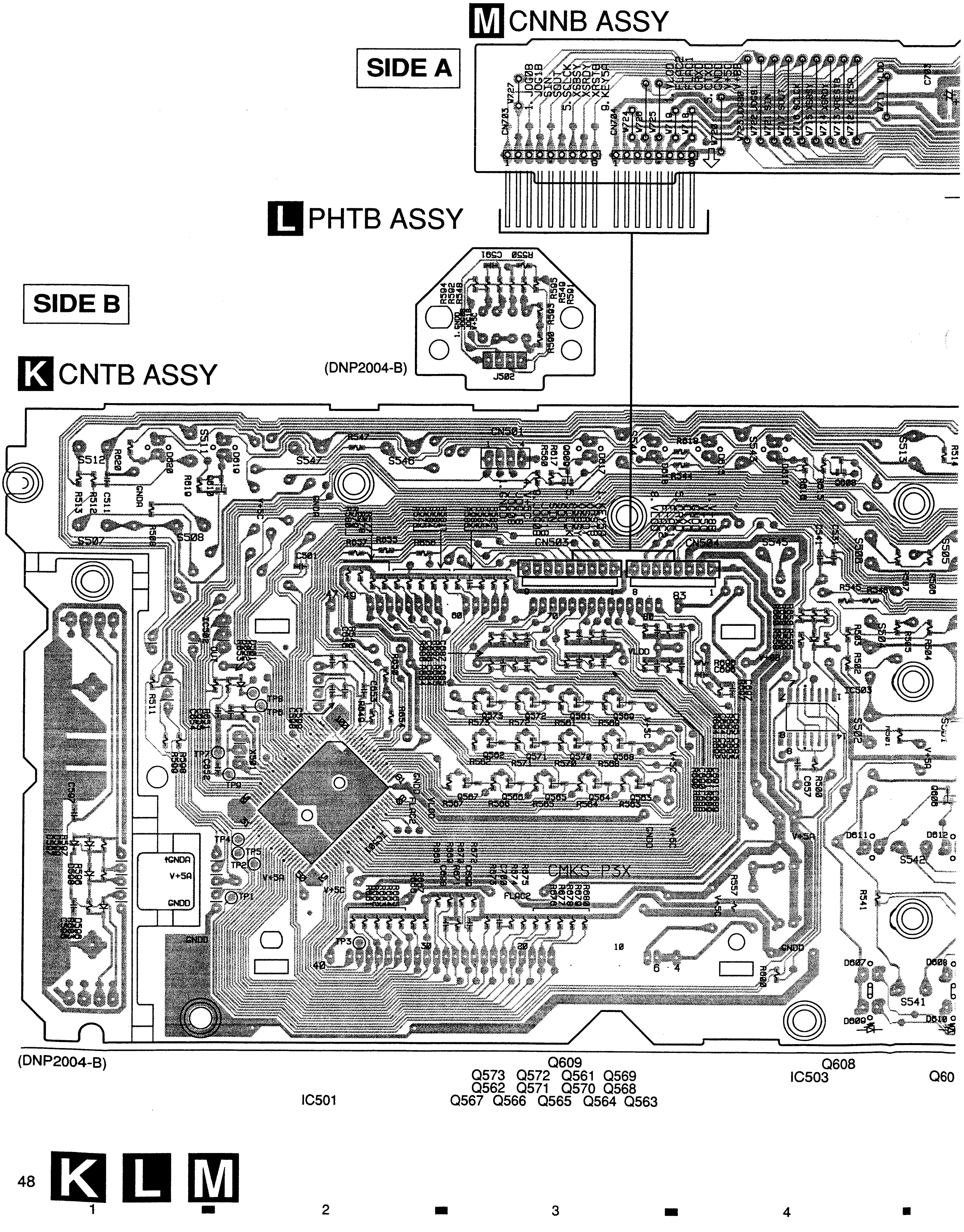
S536 : BPM TAP - A
S541 : ▶/II
S542 : CUE
S543 : IN/ REALTIME CUE
S544 : OUT/ OUT ADJ
S545 : JOG MODE
S546 : RELOOP/ EXIT
S547 : EMERGENCY LOOP

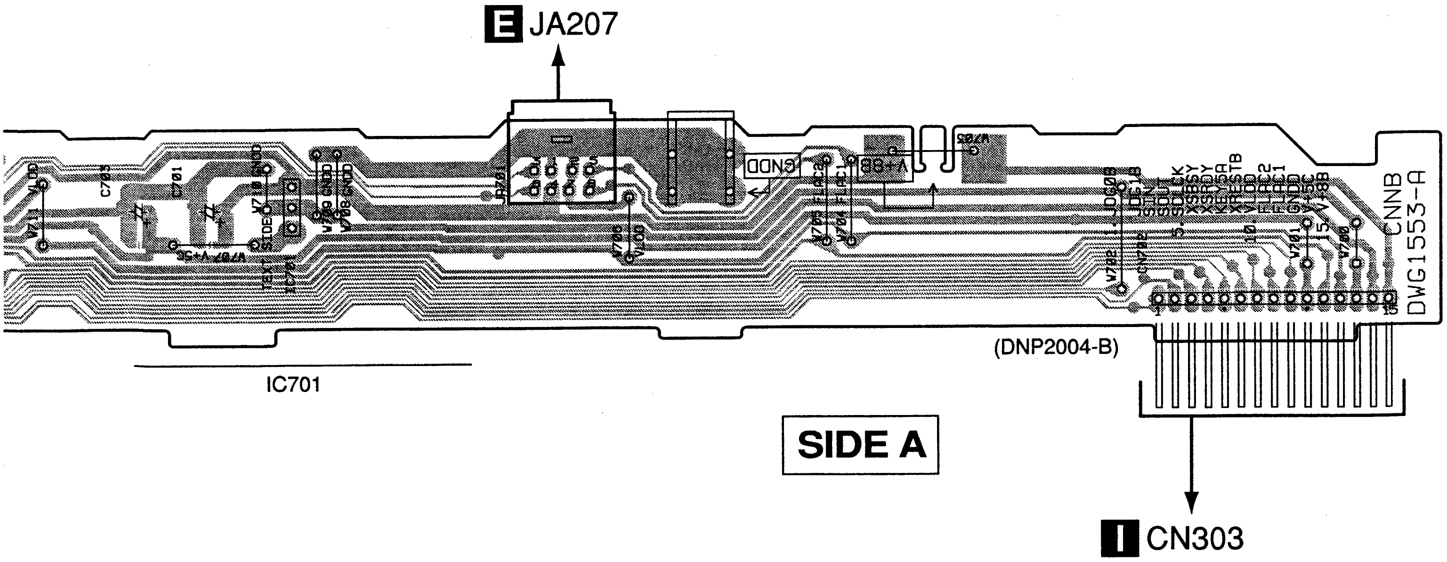
L PHTB ASSY

SIDE A


CMX-3000 PBX D591
PHTB DWG1553-A
J502
D591, 592
P2002-B)
CN501
S544
D617
S546
S547
W676
D619
S511
D620
S512
W674 GNDA
V+5C
W670 GNDD
CN503
W687
S508
S507
W688
W680
W640
VR501
IC502
W642
W641
W634 VLOD
W635
W637
W638 GNDA
W639
W644 V+5C
W643
W619
W636
X501
4.00MHz
W618
VLOD
W601
FLAC2
IC501
W608
W607
GNDA
W606
V+5A
W605
W604
GNDD
W603 V+5A
W602 V+5C
W600 FLAC2
10
20
30
40
Product Code
CNTB DWG1552-A
W580
IC502
(DNP2002-B)

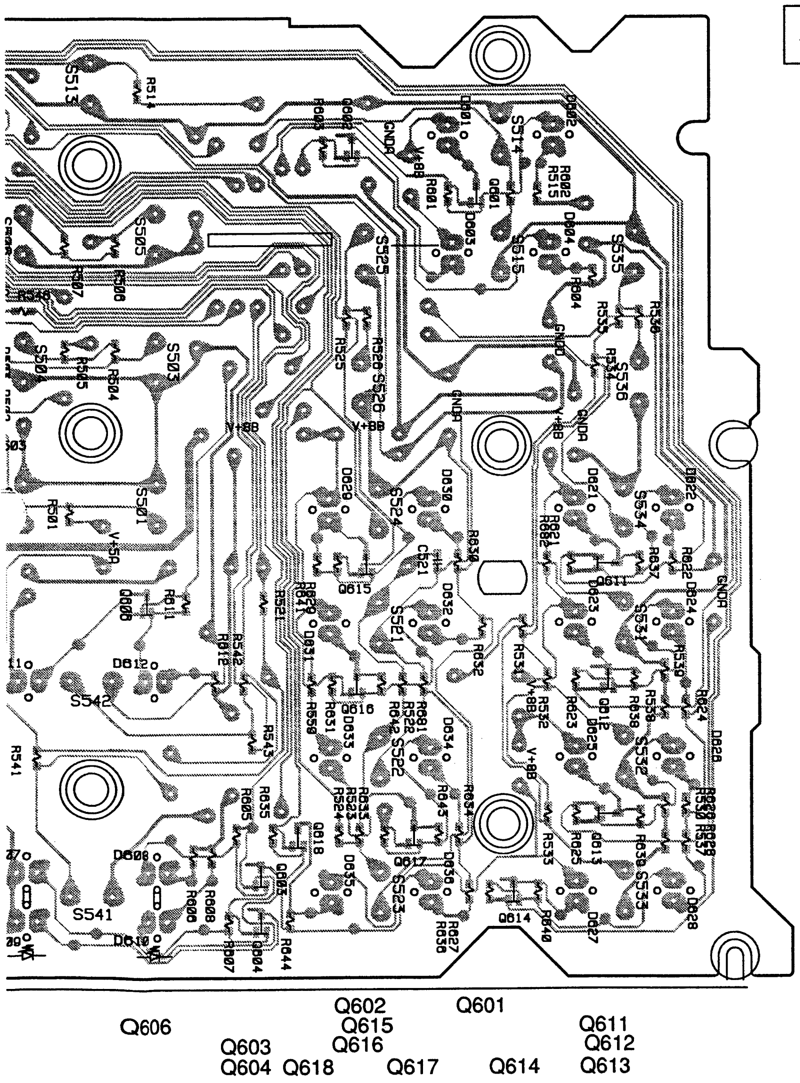
4.5 CNTB, PHTB and CNNB ASSYS


M CNNB ASSY
SIDE A
CN703
CN704
L PHTB ASSY
SIDE B
J502
(DNP2004-B)
K CNTB ASSY
CN501
CN503
CN504
S512
S511
S547
S546
S545
S513
S507
S508
S505
S504
S502
S542
S541
IC503
CMKS-P3X
(DNP2004-B)
Q609
Q573 Q572 Q561 Q569
Q562 Q571 Q570 Q568
IC501
Q567 Q566 Q565 Q564 Q563
Q608
IC503
Q60


E JA207
IC701
(DNP2004-B)
CNNB
DWG1553-A
GNDD
V+8B
I CN303

SIDE A

SIDE B


S513
S505
S503
S501
S542
S541
S514
S525
S526
S515
S535
S536
S524
S534
S521
S531
S522
S532
S523
S533
Q606
Q603
Q604
Q618
Q602
Q615
Q616
Q617
Q601
Q614
Q611
Q612
Q613

5. PCB PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*

● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56×10^1 → 561 .... RD1/4PU $\boxed{5}\boxed{6}\boxed{1}$ J
47k Ω → 47×10^3 → 473 .... RD1/4PU $\boxed{4}\boxed{7}\boxed{3}$ J
0.5 Ω → R50 .... RN2H $\boxed{R}\boxed{5}\boxed{0}$ K
1 Ω → 1R0 .... RS1P $\boxed{1}\boxed{R}\boxed{0}$ K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562×10^1 → 5621 .... RN1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ F

• LIST OF WHOLE PCB ASSEMBLIES (FOR CMX-3000)

Mark	Symbol and Description	Part No.			Remarks
		CMX-3000/ KUCXJ	CMX-3000/ WYXJ	CMX-3000/ RLBXJ	
	MAIN ASSY	DWG1556	DWG1556	DWG1556	
NSP	POWB ASSY	DWM2130	DWM2127	DWM2131	
	└ PWRB ASSY	DWR1345	DWR1345	DWR1348	
	└ ACIN ASSY	DWR1349	DWR1346	DWR1346	
	└ REGB ASSY	DWR1357	DWR1347	DWR1347	*1
	└ FRSW ASSY	DWS1314	DWS1314	DWS1314	
	└ SLM1 ASSY	DWS1315	DWS1315	DWS1315	
	└ SLM2 ASSY	DWS1316	DWS1316	DWS1316	
	└ JACB ASSY	DWX2214	DWX2200	DWX2200	*2

*1: Although DWR1357 and DWR 1347 are different in part number, they consist of the same components.
*2: Although DWX2214 and DWX2200 are different in part number, they consist of the same components.

• LIST OF PCB ASSEMBLIES (FOR CU-V163)

NSP	CONT ASSY	DWM2129
	├ CNTA ASSY	DWG1551
	├ CNTB ASSY	DWG1552
	├ CNNB ASSY	DWG1553
	├ PHTA ASSY	DWG1554
	└ PHTB ASSY	DWG1555

• CONTRAST OF PCB ASSEMBLIES

F PWRB ASSY

DWR1345 and DWR1348 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		DWR1345	DWR1348	
	S105 (Voltage Selector)	Not used	DSA1026	

H ACIN ASSY

DWR1349 and DWR1346 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		DWR1349	DWR1346	
	AN101 (Power Socket)	AKP7032	Not used	
	AN101 (1P AC Inlet)	Not used	BKP1046	

• PARTS LIST FOR CMX-3000/ KUCXJ

A MAIN ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC1012, IC1013	(315 mA)	AEK7059
⚠	IC1014	(500 mA)	AEK7060
	IC1015, IC1016	(1.5 A)	AEK7065
	IC1414, IC1415		BA7042
	IC1200		DYW1701
	IC1204		HD6417709AF100B
	IC1408		K4S281632C-TC1H
	IC1004, IC1011		LA6562
	IC1022		M51957BFP
	IC1208		MM1561JF
	IC1444, IC1445, IC1448, IC1450		NJM2100M
	IC1406		NJM2870F18
	IC1009		NJM2870F25
	IC1443, IC1447		NJM2903M
	IC1003, IC1010		TA2153FN
	IC1440		TC74VHC02FT
	IC1437		TC74VHC04FT
	IC1427, IC1428		TC74VHCT245AFT
	IC1001		TC74VHCT541AFT
	IC1430, IC1431		TC7SU04FU
	IC1017		TC7W08FU
	IC1007, IC1008		TC7WT241FU
	IC1006		TC7WU04FU
	IC1002, IC1005		TC9495F
	IC1409		XC2S30-5TQ144C
	IC1402		XCA56367PV150
	Q 1003, Q 1229		2SA1036K
	Q 1002, Q 1228		DTC114TK
	D1202, D1203		UDZ2.0B

COILS AND FILTERS

Mark	No.	Description	Part No.
	L1004, L1006, L1007, L1009		DTL1024
	F1001, F1002		DTL1090
	L1021, L1022		LCYAR68J2520

CAPACITORS

Mark	No.	Description	Part No.
	C1117, C1174, C1579, C1582, C1593		CCSRCH100D50
	C1104, C1106, C1166, C1168, C1404		CCSRCH101J50
	C1421, C1424, C1430, C1435		CCSRCH101J50
	C1033, C1034		CCSRCH120J50
	C1581, C1592		CCSRCH121J50
	C1587, C1588, C1597, C1599		CCSRCH180J50
	C1121, C1178		CCSRCH270J50
	C1099, C1100, C1164, C1165		CCSRCH330J50
	C1064, C1128, C1149, C1186		CCSRCH470J50
	C1074, C1156, C1616, C1617		CCSRCH471J50
	C1107, C1169		CCSRCK2R0C50
	C1004, C1006, C1009, C1024		CEAT101M10
	C1035, C1036, C1093, C1105, C1124		CEAT101M10
	C1135, C1137, C1161, C1167, C1181		CEAT101M10
	C1192, C1194, C1206, C1215, C1216		CEAT101M10
	C1227, C1410, C1413, C1453, C1531		CEAT101M10
	C1552		CEAT101M10
	C1132, C1189		CEAT221M10
	C1012, C1047, C1559, C1560		CEJQ101M6R3
	C1507, C1510		CEJQ1R0M50
	C1508, C1511		CEJQ220M25
	C1013, C1014, C1017		CKSRYB102K50
	C1010, C1015, C1019, C1020, C1023		CKSRYB103K50
	C1025, C1026, C1029, C1032		CKSRYB103K50
	C1044-C1046, C1048, C1055, C1065		CKSRYB103K50
	C1071, C1094, C1095, C1098		CKSRYB103K50
	C1108-C1111, C1118, C1127, C1136		CKSRYB103K50
	C1139, C1142-C1144, C1150, C1151		CKSRYB103K50
	C1154, C1162, C1163, C1175, C1185		CKSRYB103K50
	C1193, C1196, C1401-C1403		CKSRYB103K50
	C1405-C1408, C1417, C1422, C1423		CKSRYB103K50
	C1426-C1428, C1431-C1434, C1436		CKSRYB103K50
	C1486, C1512, C1533, C1534		CKSRYB103K50
	C1536, C1537, C1539, C1554		CKSRYB103K50
	C1561-C1564, C1577, C1578		CKSRYB103K50
	C1583-C1585, C1589, C1590		CKSRYB103K50
	C1594-C1596, C1598, C1601, C1603		CKSRYB103K50
	C1606, C1608-C1615, C1619, C1620		CKSRYB103K50
	C1001, C1003, C1007, C1008, C1018		CKSRYB104K25
	C1022, C1037-C1042, C1050, C1051		CKSRYB104K25
	C1056, C1061, C1069, C1070, C1081		CKSRYB104K25
	C1085-C1091, C1113, C1114, C1129		CKSRYB104K25
	C1133, C1138, C1140, C1170, C1171		CKSRYB104K25
	C1183, C1190, C1195, C1197		CKSRYB104K25
	C1202, C1203, C1207-C1209		CKSRYB104K25
	C1212-C1214, C1217-C1224, C1226		CKSRYB104K25
	C1228-C1234, C1236-C1239, C1245		CKSRYB104K25
	C1509, C1618		CKSRYB104K25
	C1066, C1152		CKSRYB153K50
	C1072, C1155		CKSRYB222K50
	C1115, C1116, C1172, C1173		CKSRYB224K16
	C1429		CKSRYB332K50
	C1078, C1157		CKSRYB333K16
	C1210, C1211, C1246		CKSRYB471K50
	C1080, C1083, C1158, C1159, C1247		CKSRYB473K50
	C1487		CKSRYB473K50
	C1119, C1176		CKSRYB562K50
	VC1001, VC1002 (40P)		VCM1010

RESISTORS

Mark	No.	Description	Part No.
	R1202-R1204, R1221, R1223		RAB4C223J
	R 1401,R 1402,R 1409,R 1413,R 1418		RAB4C223J
	R 1425,R 1426,R 1584,R 1585,R 1594		RAB4C223J
	R1086		RN1/16SE3301D
	R1085		RN1/16SE4701D
	R1711, R1715		RS1/16S1502F
	R1703, R1704, R1721, R1723		RS1/16S3301F
	R1706, R1707, R1719, R1720		RS1/16S3902F
	R1710, R1716		RS1/16S4701F
	R1705, R1722		RS1/16S5600F
	R1708, R1709, R1717, R1718		RS1/16S8202F
	Other Resistors		RS1/16S□□□ J

OTHERS

Mark	No.	Description	Part No.
	CN1005, CN1009	FPC CONNECTOR	16FMZ-ST
	CN1012	7P JUMPER CONNECTOR	52147-0710
	CN1004, CN1008	CONNECTOR POST	B2B-PH-K-S
	CN1002, CN1006	CONNECTOR POST	B3B-PH-K-S
	CN1218	5P TOP POST	B5B-EH

Mark	No.	Description	Part No.
	CN1003, CN1007	CONNECTOR	B6B-PH-K-S
	X1002	CRYSTAL RESONATOR(12MHz)	DSS1132
	CN1010	CONNECTOR	VKN1626
	X1001	CRYSTAL RESONATOR(16.9MHz)	VSS1084

B FRSW ASSY

SEMICONDUCTORS

	D 161 ,D 162		SLR-343MC(NPQ)
	D163		SLR-343VC(NPQ)

SWITCHES

	S161, S162		ASG7013
	S163		DSH1049

CAPACITORS

	C161		CKSRYB103K50

RESISTORS

	Other Resistors		RS1/16S□□□ J

OTHERS

	161	7P CABLE HOLDER	51048-0700
	J 161	JUMPER WIRE	D20PDY0720E

C SLM1 ASSY

SWITCHES AND RELAYS

	S801, S802		DSG1017

OTHERS

	CN801	CONNECTOR POST	S3B-PH-K-S

D SLM2 ASSY

SWITCHES AND RELAYS

	S901, S902		DSG1017

OTHERS

	CN901	CONNECTOR POST	S3B-PH-K-S

E JACB ASSY

SEMICONDUCTORS

⚠	IC209	(315 mA)	AEK7059
⚠	IC212	(500 mA)	AEK7060
⚠	IC207	(1.5 A)	AEK7065
⚠	IC210	(0.4 A)	ICP-N10
	IC211		NJM2360M
	IC204, IC205		NJM4558MD
	IC181		NJM78L05A
	IC201, IC202		PE8001A
	IC172		TC74ACT04F
	Q171		2SB1237X
	Q215		2SB1375
	Q213, Q214		2SC2412K
	Q205–Q212		2SD2114K
	Q 201 ,Q 203		DTA124EUA
	Q182		DTA143EUA
	Q 202 ,Q 204		DTC124EUA
	D181, D201–D204		1SS355
	D211		EC10QS04
	D212		UDZ33B
	D 205 ,D 207 ,D 208 ,D 210		UDZS10B
	D214		UDZS5.1B
	D171		UDZS8.2B

COILS AND FILTERS

	L215		DTL1083
	L213, L214		LCTA470J2520
	L201, L202		LRCA4R7J
	L208, L212, L217–L221		VTL1084

CAPACITORS

	C273		CCSRCH181J50
	C274		CCSRCH220J50
	C202, C208, C220, C268		CEAT101M10
	C270, C271		CEAT101M10
	C171		CEAT1R0M50
	C275		CEAT330M50
	C207, C214, C219, C226, C262		CEAT470M16
	C205, C213, C217, C225		CEAT470M25
	C172		CEAT470M50
	C201, C261, C272		CEHAR330M10
	C230, C233, C237, C240		CEJQNP220M16
	C266, C267		CKCYF103Z50
	C248, C250		CKSRYB103K50
	C173, C204, C206, C211, C212		CKSRYB104K25
	C216, C218, C223, C224, C229		CKSRYB104K25
	C231, C239, C241, C244–C247		CKSRYB104K25
	C249, C251, C269		CKSRYB104K25
	C276		CKSRYB473K50
	C228, C232, C234–C236, C238		CQMA152J50
	C242, C243		CQMA152J50

RESISTORS

	R221		RD1/2VM222J
	R171, R172		RD1/2VM560J
	R231, R240, R250, R258		RN1/16SE2202D
	R201		RS1/16S2202F
	R202		RS1/16S4701F
	Other Resistors		RS1/16S□□□ J

OTHERS

	208	JACK	AKN7003
	JA201, JA202	2P JACK	DKB1053
	JA205, JA206	JACK BOARD	PKB1033
	JA203, JA204	JACK/12V	PKN1004
	207	I/O JACK	VKN1070
	CN201	B TO B CONNECTOR 30P	VKN1627
	0	SCREW PLATE	VNE1948
		PCB BINDER	VEF1040

F PWRB ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC104	(800 mA)	AEK7008
⚠	IC107	(1.5 A)	AEK7011
⚠	IC101	(4 A)	AEK7018
⚠	IC103	(5 A)	AEK7019
⚠	IC108	(315 mA)	AEK7059
⚠	IC106	(1.5 A)	ICP-N38
⚠	D 103 -D 106		1SR154-400
⚠	D102		D3SBA20(B)
	D111–D114		RB060L-40
⚠	D107–D110		RB160L-40

COILS AND FILTERS

Mark	No.	Description	Part No.
⚠	L101		VTL-004

CAPACITORS

Mark	No.	Description	Part No.
⚠	C103	(0.01 μF/ AC275V)	ACE7027
	C 125 -C 127		CEAT101M10
	C123		CEHAT221M2A
	C124		CEHAT472M16
	C121		CEHAT472M25
	C122		CEHAT682M16
	C104–C108, C110–C113		CKSRYB473K50
	C128–C136		CKSRYB473K50

RESISTORS

Mark	No.	Description	Part No.
	Other Resistors		RS1/16S□□□ J

OTHERS

Mark	No.	Description	Part No.
	CN106	9P JUMPER CONNECTOR	52147-0910
⚠	CN103	SOCKET 4P	AKP7132
	CN104	5P TOP POST	B5B-EH
	CN105	9P TOP POST	B9B-EH
	0	SCREW PLATE	VNE1948

G ACIN ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Part No.
⚠	S101		RSA1001

CAPACITORS

Mark	No.	Description	Part No.
⚠	C102	(0.01μF/ AC275V	ACE7027
⚠	C101	(10000PF/AC250V)	ACG7033

OTHERS

Mark	No.	Description	Part No.
⚠	CN102	PLUG 4P	AKM7055
⚠	AN101	POWER SOCKET	AKP7032
⚠	H101, H102	FUSE CLIP	AKR1004

H REGB ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC153		BA033T
⚠	IC152		BA05T
⚠	IC151		PQ15RW21

CAPACITORS

Mark	No.	Description	Part No.
	C155, C156		CEHAT101M10
	C154		CEHAT470M16
	C151–C153		CKSRYB103K50

RESISTORS

Mark	No.	Description	Part No.
	R152		RN1/16SE2201D
	R151		RN1/16SE3901D

OTHERS

Mark	No.	Description	Part No.
	151	9P CABLE HOLDER	51048-0900
	J 151	JUMPER WIRE	D20PDY0910E
	0	REGURATOR PLATE	DNH2507
		SCREW	BBZ30P060FMC

I CNTA ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC301		PD5764A
	IC305		TC74HC14AF
	IC303, IC304		TC7S86F
	Q361–Q373, Q403, Q404 ,Q406		2SC4081
	Q408–Q410		2SC4081
	D301, D302, D396–D399		1SS355
	D411, D412		SLI-343URCW(RST)
	D415–D420		SLI-343YCW(RST)
	D407–D410		TLGE68TG(NP)

SWITCHES

	S301–S308, S311–S313		ASG7013
	S341–S347		ASG7013

CAPACITORS

	C451		CEAT101M10
	C458		CEAT1R0M50
	C459		CEAT220M50
	C301, C311, C396–C399		CKSRYB102K50
	C452–C455, C457		CKSRYB103K50
	C483–C500		CKSRYB221K50
	C461, C462		CKSRYB471K50

RESISTORS

	R396, R397		RS1/16S2201F
	VR301	(50kΩ-B x2)	DCV1011
		Other Resistors	RS1/16S□□□ J

OTHERS

	CN303	CONNECTOR	52084-1510
	CN301	4P JUMPER CONNECTOR	52147-0410
	V301	VACUUM FL DISPLAY	DEL1047
	X301	CERAMIC RESONATOR	DSS1131
		FL HOLDER	DNK3956

J PHTA ASSY

SEMICONDUCTORS

	D391, D392		GP1S94

CAPACITORS

	C391		CKSRYB103K50

RESISTORS

		Other Resistors	RS1/16S□□□ J

OTHERS

	J 302	JUMPER WIRE	D20PWY0415E

K CNTB ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC501		PD5764A
	IC502		PST994D
	IC503		TC74AC04F
	Q561–Q573, Q601–Q604, Q606		2SC4081
	Q608–Q618		2SC4081
	D501, D596–D599		1SS355
	D611, D612, D621, D 622		SLI-343URCW(RST)
	D629, D 630		SLI-343URCW(RST)
	D601–D604, D615–D620		SLI-343YCW(RST)
	D623–D628, D631–D636		SLI-343YCW(RST)
	D607–D610		TLGE68TG(NP)
	D590		UDZS5.1B

SWITCHES

	S501–S508, S511–S515		ASG7013
	S521–S526, S531–S536		ASG7013
	S541–S547		ASG7013

CAPACITORS

	C651		CEAT101M10
	C658		CEAT1R0M50
	C659		CEAT220M50
	C501, C511, C521, C531, C541		CKSRYB102K50
	C596–C599, C656		CKSRYB102K50
	C652–C655, C657		CKSRYB103K50
	C683–C700		CKSRYB221K50

RESISTORS

	R596, R597		RS1/16S2201F
	VR501	(50kΩ-B x2)	DCV1011
		Other Resistors	RS1/16S□□□ J

OTHERS

	CN504	CONNECTOR	52084-0810
	CN503	CONNECTOR	52084-0910
	CN501	4P JUMPER CONNECTOR	52147-0410
	V501	VACUUM FL DISPLAY	DEL1047
	X501	CERAMIC RESONATOR (4MHz)	DSS1131
		FL HOLDER	DNK3956

L PHTB ASSY

SEMICONDUCTORS

	D591, D592		GP1S94

CAPACITORS

	C591		CKSRYB103K50

RESISTORS

		Other Resistors	RS1/16S□□□ J

OTHERS

	J 502	JUMPER WIRE	D20PWY0415E

M CNNB ASSY

SEMICONDUCTORS

	IC701		BA05T

CAPACITORS

	C703		CEAT101M10
	C701		CEAT101M16
	C702, C704		CKSRYB103K50

OTHERS

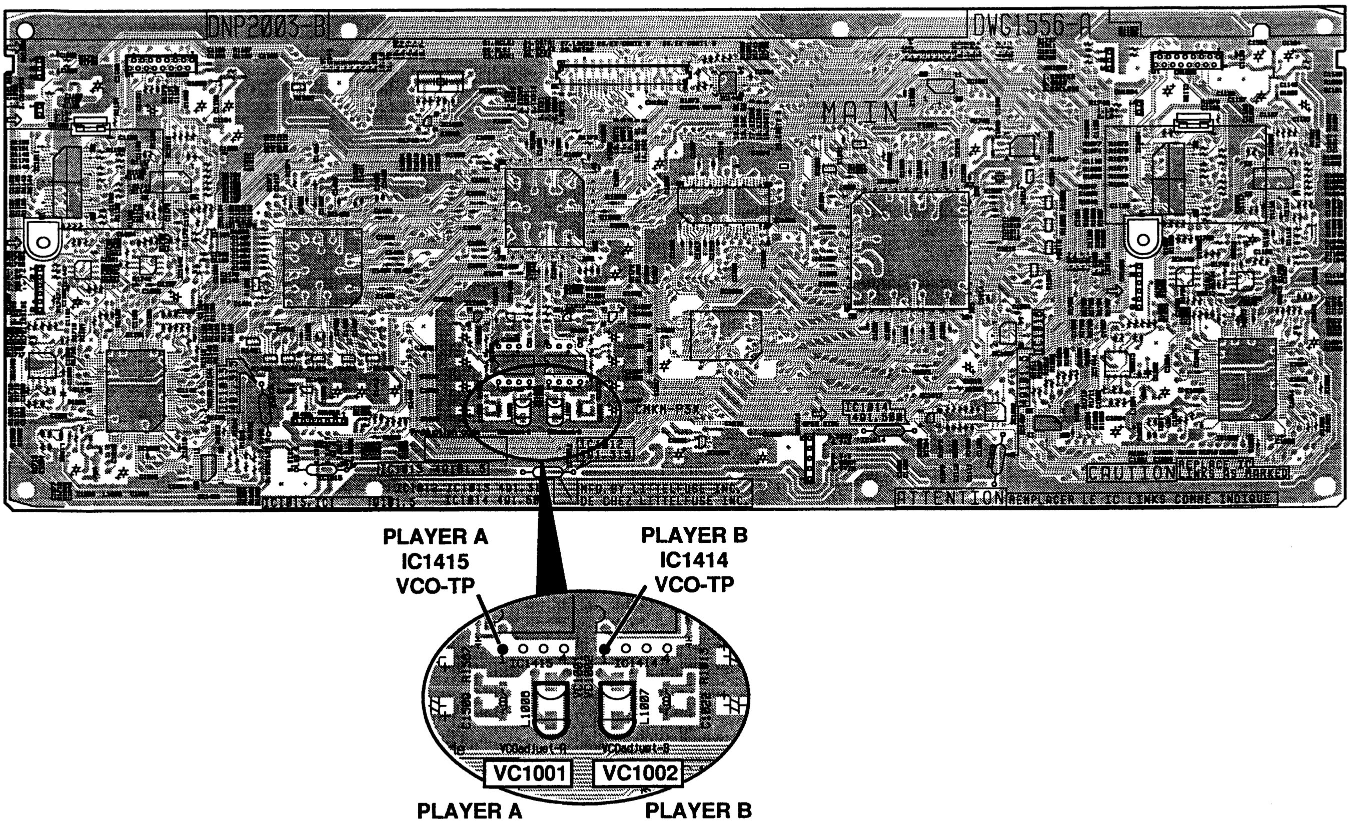
	CN704	CONNECTOR 8P	53095-0810
	CN703	CONNECTOR 9P	53095-0910
	CN702	CONNECTOR 15P	53095-1510
	0	I/O JACK	VKN1070
	0	SCREW PLATE	VNE1948

6. ADJUSTMENT

6.1 ADJUSTMENT ITEMS AND LOCATION

■ Adjustment Points (PCB Part)

A MAIN ASSY SIDE A

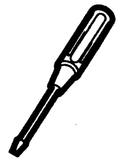
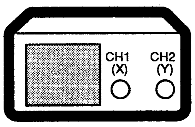

DNP2003-B
DWG1556-A
MAIN
PLAYER A
IC1415
VCO-TP
PLAYER B
IC1414
VCO-TP
VC1001
VC1002
PLAYER A
PLAYER B

■ Adjustment Items

[Electrical Part]

① VCO Free-running Adjustment

6.2 JIGS AND MEASURING INSTRUMENTS

 ⊖ Screwdriver (small)	 Dual-trace oscilloscope (10:1 probe)

6.3 NECESSARY ADJUSTMENT POINTS

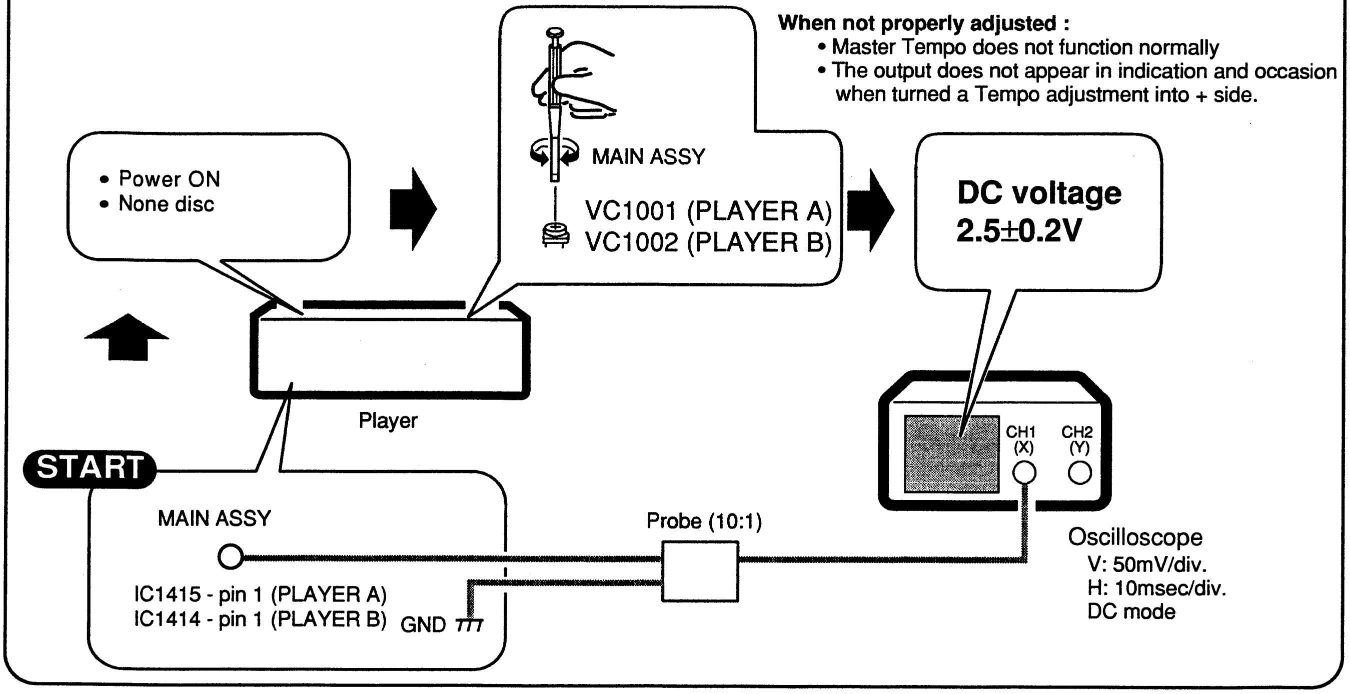
When		Adjustment Points
Exchange MAIN ASSY	➡	① → Page 56
Exchange CD MECHANISM ASSY (DA11T3CNPIO)	➡	———

6.4 ELECTRICAL ADJUSTMENT

① VCO Free-running Adjustment

Objective : To optimize the VCO free-running frequency

When not properly adjusted :
- Master Tempo does not function normally
- The output does not appear in indication and occasion when turned a Tempo adjustment into + side.


• Power ON
• None disc
MAIN ASSY
VC1001 (PLAYER A)
VC1002 (PLAYER B)
DC voltage
2.5±0.2V
Player
START
MAIN ASSY
IC1415 - pin 1 (PLAYER A)
IC1414 - pin 1 (PLAYER B)
GND
Probe (10:1)
CH1 (X)
CH2 (Y)
Oscilloscope
V: 50mV/div.
H: 10msec/div.
DC mode

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 SERVICE MODE

■ Outline of the Service Mode

This unit prepares the test mode in the controller and player sections.

① **Confirmation mode of the controller button and display function**
There are following two ways in the mode confirming the controller button and display function.
Mode 1: When connect the Controller section to the Player, and confirm it.
Mode 2: When connect the power supply to Controller section being simple, and confirm it.
Basic operation is the same with both modes, but FL does not light.

② **The mode which confirms the operation with the player being simple (Use the remote control unit.)**
Connect the Remote control unit (RU-V101) to a DATA IN/OUT terminal of the Player and confirms the operation.

③ **State confirmation mode with the system operation**
Confirm the software version of each microcomputer and active state with the display.

■ Confirmation Mode of the Controller Button and Display Function

- **Mode 1**

Enter this mode when turns the power on while pressing the AUTO button of each player simultaneously.
Mode 1 can confirm the state of each other button with FL other than the operation of mode 2.

- **Mode 2**

Enter this mode when connects a screw terminal to GND and +8V from the external DC power supply to V+8B by controller section being simple. Further, it is not necessary to press buttons in the power-up.

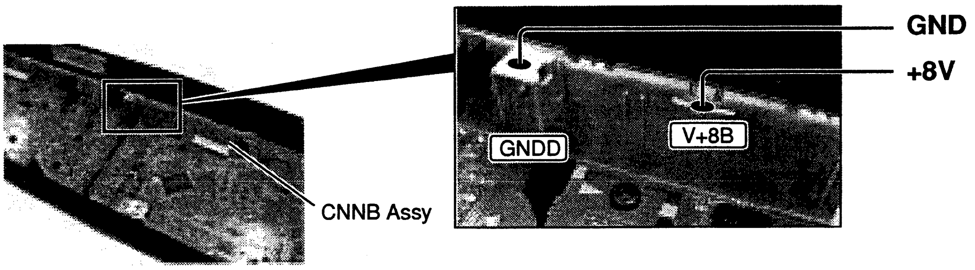
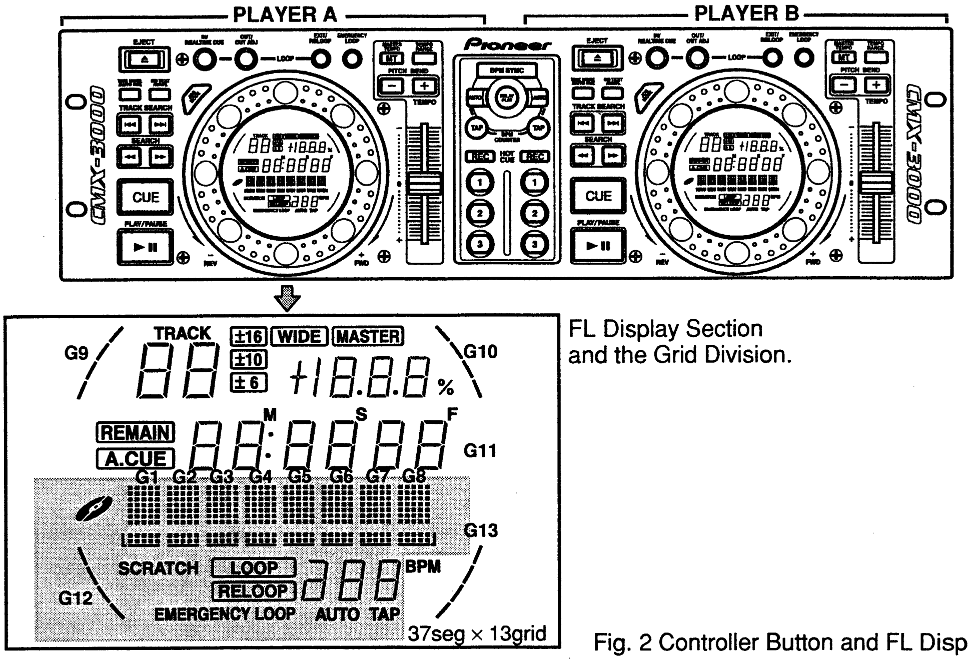


Fig.1 External DC Power Supply Connection Position

Note : Mode 1 and mode 2 are the same operations basically. But a power supply of FL system is not supplied in case of mode 2. Therefore cannot confirm it with FL.
Explain the operation about mode 1 here. (Mode 2 is the same except that FL of mode 1 does not light.)



FL Display Section and the Grid Division.

Fig. 2 Controller Button and FL Display Section

• Confirm the FL display operation
In mode 1, display the demonstration display of fixed pattern and display 1/2 light, all lighting and all lights out repeatedly.
In addition, display the button name in dot matrix of Grid 1 to Grid 8 while a button is pressed.

• Confirm the each button operation
Corresponding two LED lights when pressed the button of each player.
Relation of LED corresponding to each button is the following matrix, and vertical scale of each button and button LED corresponding to horizontal scale light it.
For example, "CUE" button LED of player B and "HOT CUE ①" button LED of player A light it when pressed "EJECT" button of player B.

When "BPM SYNC" and "RELAY PLAY" button were pressed, "CUE" button LED of player B and "HOT CUE (REC)" button LED of player A and "HOT CUE ③" button LED of player B light it.

	PLAY/PAUSE (▶/II) Button LED of Each Player	CUE Button LED of Each Player	IN/REALTIME CUE Button LED of Each Player	OUT/OUT ADJ Button LED of Each Player
HOT CUE ③_a Button LED	SERCH (◀◀)	MASTER TEMPO	HOT CUE ①	PLAY/PAUSE (▶/II)
HOT CUE ②_a Button LED	SERCH (▶▶)	TEMPO RANGE	HOT CUE ②	CUE
HOT CUE ①_a Button LED	TRACK SERCH (I◀◀)	EJECT	HOT CUE ③	IN/REALTIME CUE
HOT CUE (REC)_a Button LED	TRACK SERCH (▶▶I)	BPM SYNC (Player B)	HOT CUE (REC)	OUT/OUT ADJ
HOT CUE ③_b Button LED	TIME MODE / AUTO CUE	RELAY PLAY (Player B)	AUTO	JOG MODE
HOT CUE ②_b Button LED	CD TEXT / WAVE		TAP	EXIT/RELOOP
HOT CUE ①_b Button LED	PITCH BEND (+)			EMERGENCY LOOP
HOT CUE (REC)_b Button LED	PITCH BEND (–)			

In the mode 1, display the button name to correspond in dot matrix in the FL.

Button	FL Display	Button	FL Display
SEARCH (◀◀) Button	SERCH ◀◀	HOT CUE ① Button	HOTCUE 1
SEARCH (▶▶) Button	SERCH ▶▶	HOT CUE ② Button	HOTCUE 2
TRACK SEARCH (I◀◀) Button	TRACK I◀◀	HOT CUE ③ Button	HOTCUE 3
TRACK SEARCH (▶▶I) Button	TRACK ▶▶I	HOT CUE (REC) Button	HOT REC
TIME MODE / AUTO CUE Button	TIME/CUE	AUTO Button	AUTO
CD TEXT / WAVE Button	TEXTWAVE	TAP Button	TAP
PITCH BEND (+) Button	PITCH +	PLAY/PAUSE (▶/II) Button	PLAY
PITCH BEND (–) Button	PITCH –	CUE Button	CUE
MASTER TEMPO Button	M.T *** (Note *1)	IN/REALTIME CUE Button	LOOP IN
TEMPO RANGE Button	TEMPO *** (Note *1)	OUT/OUT ADJ Button	LOOP OUT
EJECT (⏏) Button	EJECT	JOG MODE Button	JOG MODE
BPM SYNC Button	BPM SYNC *2	EXIT/RELOOP Button	RELOOP
RELAY PLAY Button	RELAY PL *2	EMERGENCY LOOP Button	EM. LOOP

Note *1 : Reading value of the TEMPO slider (+10 to 0 to –10) displays in * * *.
*2 : Display in FL of the player B side.

• Confirm the JOG operation
Button LED corresponding to each JOG blinks when turned JOG.
When JOG of player A side moves: RELAY PLAY button LED light or turn off the light in the state of the JOG address that read in.
When JOG of player B side moves: BPM SYNC button LED light or turn off the light in the state of the JOG address that read in.

• Confirm the each button LED
In this unit, all button LED light fixed time at the power-up.
In addition, it can confirm the lighting state by performing the "Confirm the each button operation", "Confirm the JOG operation" and "Confirm the TEMPO slider".

• Confirm the TEMPO slider
In the position which read-in from the TEMPO slider, MT button LED lights at + side, and MT button LED turns off the light at – side.

However, there is a case that lights or turns off the light for unevenness of parts of TEMPO slider at the center tap periphery. In addition, when TEMPO button and MT button were pressed in mode 1, match with button name in dot matrix in the FL, and display reading value of TEMPO slider by a value of +10 to 0 to –10.

■ Confirmation Mode of Operation with the Player Being Simple

Connect the remote control unit (RU-V101) to DATA IN/OUT terminal of the Rear panel of the player section, and confirm the operation.
When use the remote control unit, remove a connection cable with the control section before power-up, then connect the remote control unit.

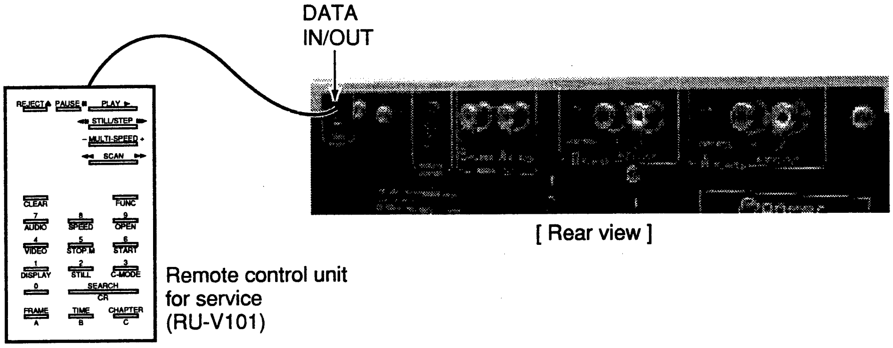
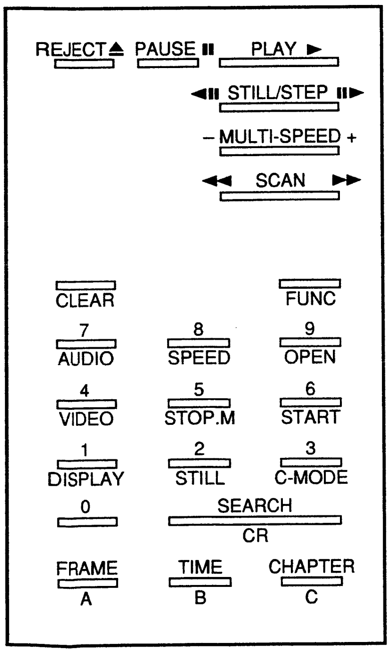


Fig. 3 Connection of the Remote Control Unit for Service

• Function of the remote control unit (RU-V101) for service



	Button Corresponding to RU-V101	Digital SW OFF in CDJ Mode	Digital SW ON in Digital Mode
Player Select	STOP. M (FUNC + 5)	○	○
A Time Mode Set	TIME		○
Track Mode Set	CHAPTER	○	○
Frame Mode Set	FRAME		○
Play	PLAY ►	○	○
(Reject)	REJECT ▲		○
(Pause)	PAUSE ❚❚	○	○
(Search)	SEARCH	Track Search	○
(Scan Forward)	SCAN ►►		○
(Scan Reverse)	SCAN ◄◄		○
(1 Track Search Forward)	STILL / STEP ❚❚►	○	○
(1 Track Search Reverse)	STILL / STEP ◄❚❚	○	○
(Eject)	OPEN (FUNC + 9)	○	○
(Speed)	SPEED (FUNC + 8)		○
(X Speed)	A (FUNC + FRAME)		○
(Test / Normal Mode Change)	C-MODE (FUNC + 3)		○
(Servo All OFF)	0 + TIME		○
(Focus ON)	1 + TIME		○
(Spindle Kick, Tracking ON / OFF)	2 + TIME		○
(Tracking OFF)	3 + TIME		○
(Slide FWD)	4 + TIME		○
(Slide REV)	5 + TIME		○
(Search TR No. 2)	6 + TIME		○

• Specification method of the player issuing the command
One remote control unit is prepared for two players in this unit.
It is necessary to specify the player beforehand when issues the command to each player.
Specification method of player A (left side from the front): Press buttons of "1", "STOP.M" ("FUNC" and "5") in order.
Specification method of player B (right side from the front): Press buttons of "2", "STOP.M" ("FUNC" and "5") in order.

Command is published by the specified player till the next Player Select command is issued after this command issue.

• Specification method of addressing modes in the search
There are three ways of search methods of time search, track search and frame search in this unit.
It is necessary to specify each mode when performs each search.

• Time search (A Time mode set)
Set absolute time (minute, second, frame) in the address mode.
[Examples] When search for 2 minutes 34 seconds 56 frame:
Press buttons of "TIME", "0", "2", "3", "4", "5", "6" and "SEARCH" in order.

• Track search (Track mode set)
Set track number in the address mode.
[Examples] When search for track 5:
Press buttons of "CHAPTER", "5" and "SEARCH" in order.

• Frame search (Frame mode set)
Set frame in the address mode.
[Examples] When search for 1200 frame:
Press buttons of "1", "2", "0", "0" and "SEARCH" in order.

• Player operation command
(Play) : Playback

(Reject) : Stop

(Pause) : Pause. Also stop the scan operation during scan, and become pause.
Become the sound output pause in the CDJ mode.

(Scan Forward) : Perform the scan opearation in the forward direction.
Press the PAUSE button when completes the scan operation.

(Scan Reverse) : Perform the scan opearation in the reverse direction.
Press the PAUSE button when completes the scan operation.

(1 Track Search Forward) : Perform the track search in the forward direction.

(1 Track Search Reverse) : Perform the track search in the reverse direction.

(Eject) : Perform the disc eject either Playback state or Stop state.

(Speed) : In the CDJ mode, set the playback speed (tempo) that specified with the argument.
An argument is three columns of figure and specify 0: – (minus) or 1: + (plus) with 100-place.
And specify (from 0 to 16) a tempo (%) by two places of remainders.
Example: It becomes the +1% setting by pressing buttons of "1", "0", "1", "SPEED" ("FUNC" and "8") in order.
It becomes the –10% setting by pressing buttons of "0", "1", "0", "SPEED" ("FUNC" and "8") in order.
It becomes the +16% setting by pressing buttons of "1", "1", "6", "SPEED" ("FUNC" and "8") in order.

• Test operation command
As for the following command, an operation becomes possible in the digital mode (digital mode switch of front panel is ON).
Because there is a case to damage the player when test operation command mistakes usage, be careful.

(X Speed) : In the digital mode, switch the rotation speed of the player to normal speed and double speed .
Further, sound cannot output in the double speed.
Example:
It becomes the normal speed playback setting by pressing buttons of "1" and "A" ("FUNC" and "FRAME") in order.
It becomes the double speed playback setting by pressing buttons of "2" and "A" ("FUNC" and "FRAME") in order.
* This command issues a command by stopped state in order to issue a command to servo DSP directly.

(Test/Normal Mode Change) : Switch the Test mode/Normal mode by "C-MODE" ("FUNC" and "3") buttons.
Can use only commands of 6TM from 0TM in the test mode.

(Servo All OFF) : During servo ON, turn all servo OFF when pressing "0" and "TIME" buttons in order.

(Focus ON) : During CD STOP, turn the LD ON and perform the auto focus when pressing "1" and "TIME" buttons in order.

(Spindle Kick and Tracking ON/OFF) : During tracking servo OFF, perform the spindle kick and turn the automatic adjustment processing and tracking servo ON when pressing "2" and "TIME" buttons in order.
Also during tracking servo ON, turn the tracking servo OFF when pressing "2" and "TIME" buttons in order.

(Tracking OFF) : During tracking servo ON, turn the tracking servo OFF when pressing "3" and "TIME" buttons in order.

(Slide FWD) : During tracking servo ON, Turn the tracking servo OFF and move the slider in the FWD direction when pressing "4" and "TIME" buttons in order.

(Slide REV) : Turn the tracking servo OFF and move the slider in the REV direction when pressing "5" and "TIME" buttons in order during tracking servo ON.

(SEARCH TR No. 2) : During CD STOP, perform the following operation when pressing "6" and "TIME" buttons in order.
LD ON - Auto focus - Spindle kick - automatic adjustment processing - Second tune search - Tracking servo ON
When performed Tracking OFF, there is the case that cannot rise up in this command.
In that case please repeat once again after power OFF and ON.

* : When rise up by a step with the test mode, input a command by pressing buttons of "0", "TIME", "1", "TIME", "2" and "TIME" in order.

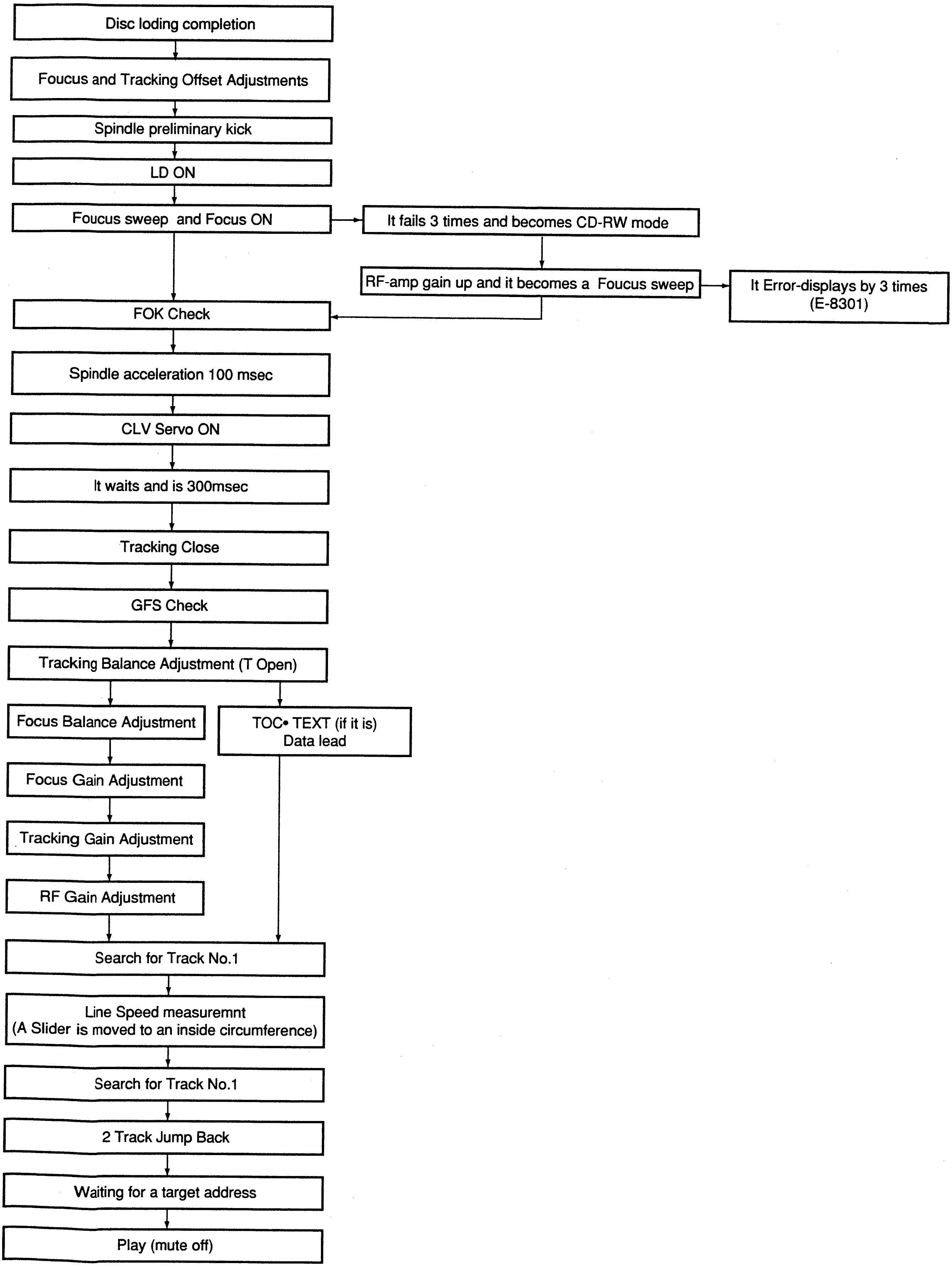
■ State Confimation Mode in the System Operation

The mode which confirms confirmation and operating state of software version of each microcomputer by display.

• Confirmation method of the microcomputer software version of the controller section
Load two microcomputers on the controller section.
As for the symptom of a version of each microcomputer, dot matrix is displayed for about 2 seconds while pressing each PITCH BEND (+) button by turning the power on.

• Confirmation method of the player section
Player section processes both players with one microcomputer.
As for the method to confirm a microcomputer version, a version is displayed by long push of CD TEXT/WAVE button and OUT/OUT ADJ button in FL.

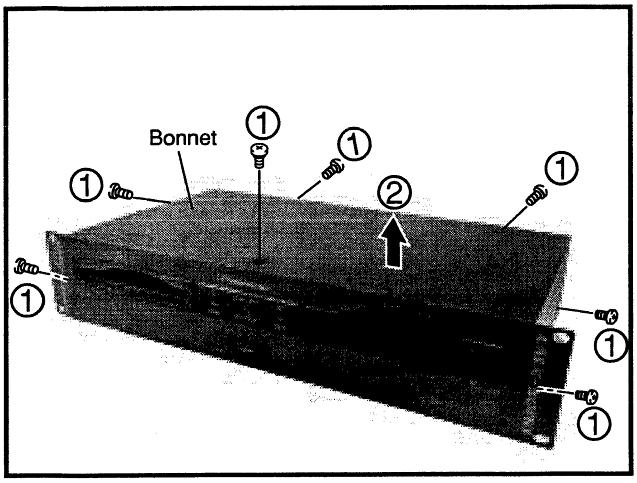
7.1.2 STARTING SEQUENCE


Disc loding completion
Foucus and Tracking Offset Adjustments
Spindle preliminary kick
LD ON
Foucus sweep and Focus ON
It fails 3 times and becomes CD-RW mode
RF-amp gain up and it becomes a Foucus sweep
It Error-displays by 3 times (E-8301)
FOK Check
Spindle acceleration 100 msec
CLV Servo ON
It waits and is 300msec
Tracking Close
GFS Check
Tracking Balance Adjustment (T Open)
Focus Balance Adjustment
TOC• TEXT (if it is) Data lead
Focus Gain Adjustment
Tracking Gain Adjustment
RF Gain Adjustment
Search for Track No.1
Line Speed measuremnt (A Slider is moved to an inside circumference)
Search for Track No.1
2 Track Jump Back
Waiting for a target address
Play (mute off)

7.1.3 DISASSEMBLY

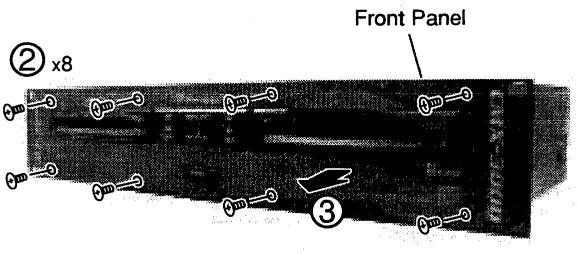
(1) CMX-3000

■ Bonnet


Bonnet
①
①
①
②
①
①
①
①

■ Front panel Section

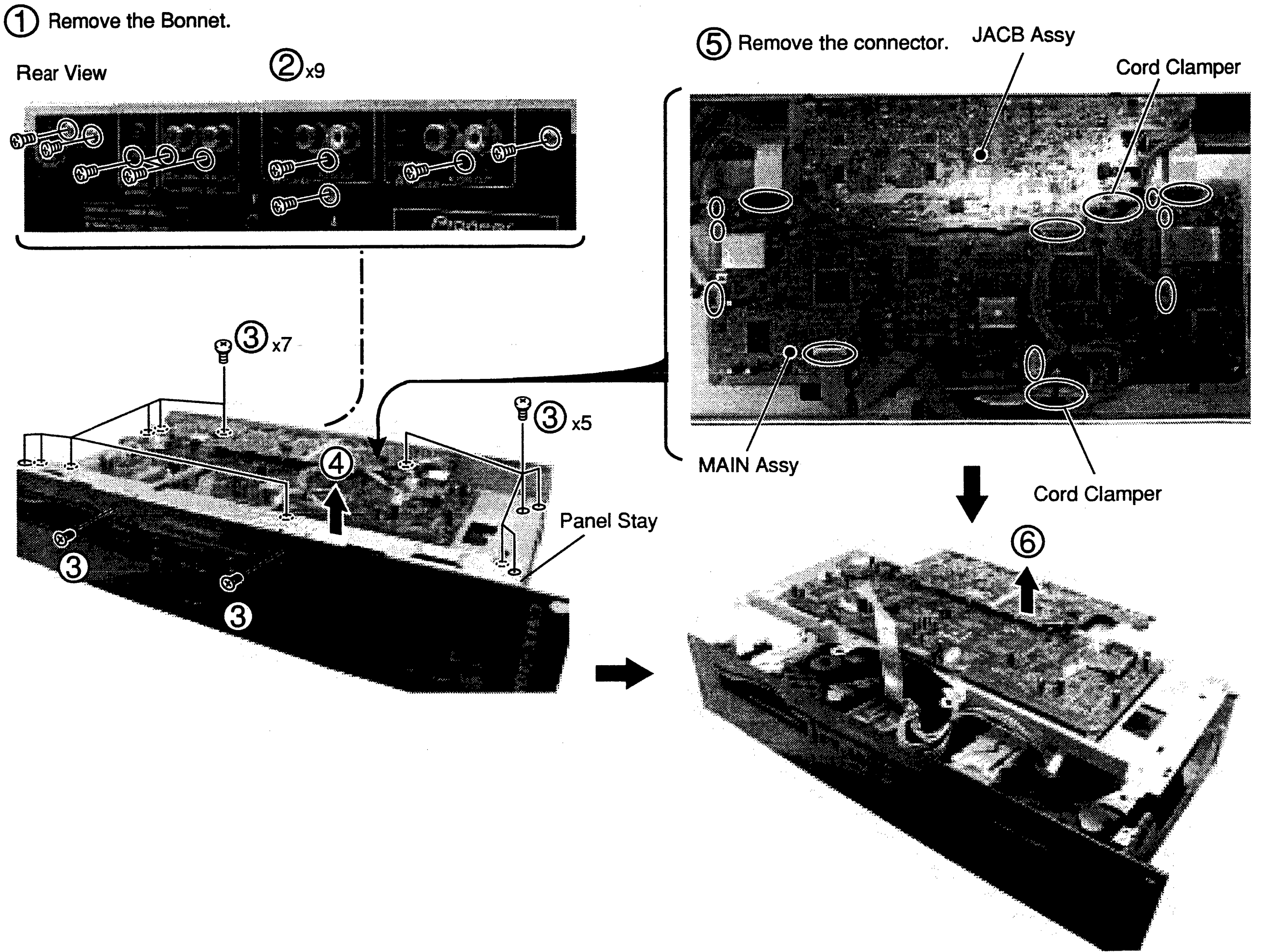
① Remove the Bonnet.


Front Panel
② x8
③

■ MAIN Assy - Player Section

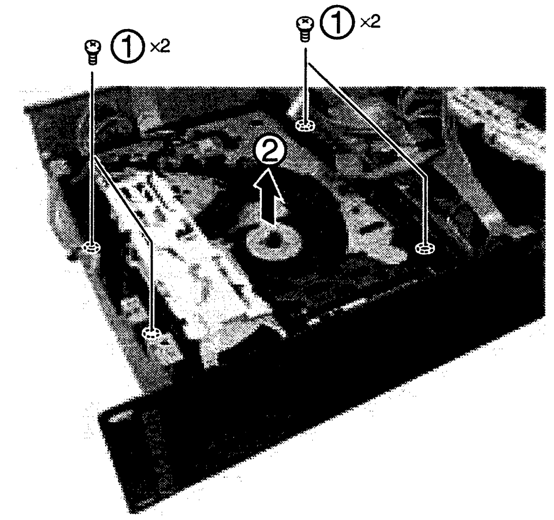
① Remove the Bonnet.

⑤ Remove the connector.

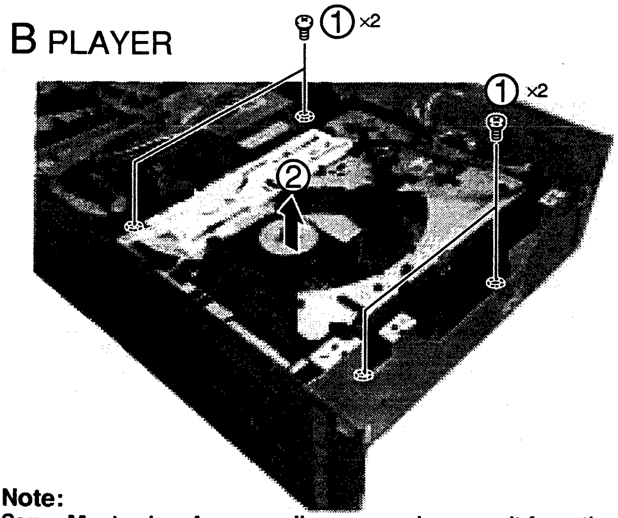

Rear View
②x9
③x7
③x5
④
③
③
Panel Stay
JACB Assy
Cord Clamper
MAIN Assy
Cord Clamper
⑥

■ SLOT-IN MECHANISM Assy

A PLAYER

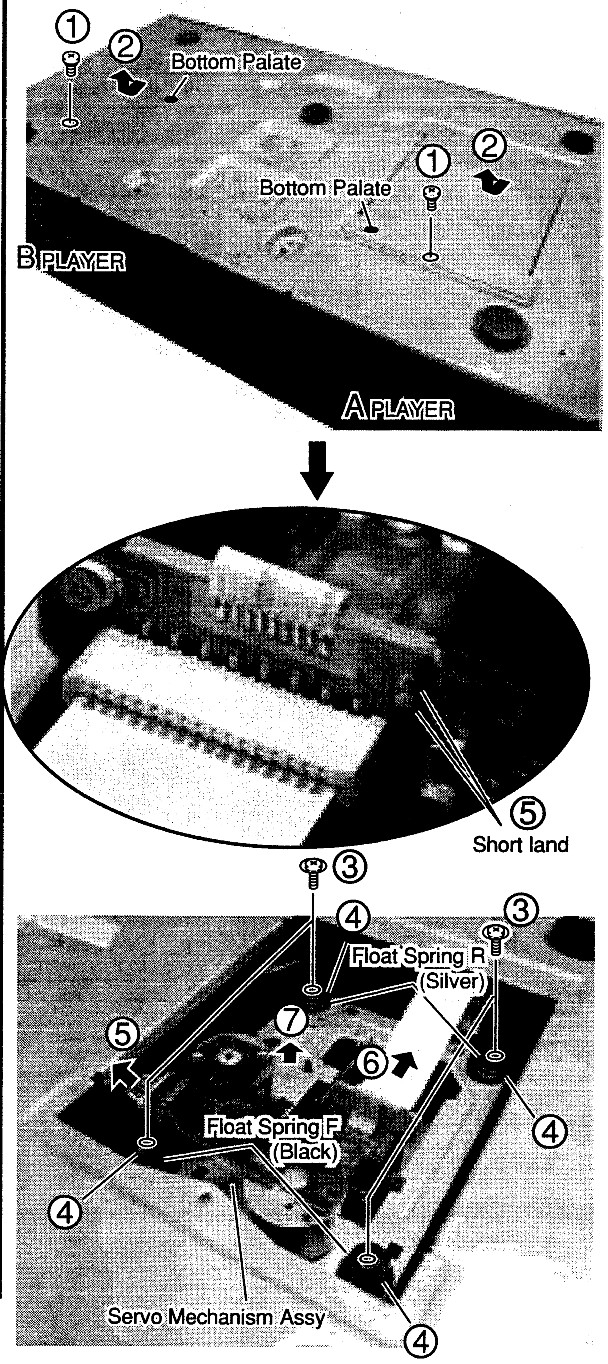


B PLAYER



Note:
Servo Mechanism Assy can diagnose and remove it from the backside.
(Inverts the product, and not performing the operation check.)

■ SERVO MECHANISM Assy

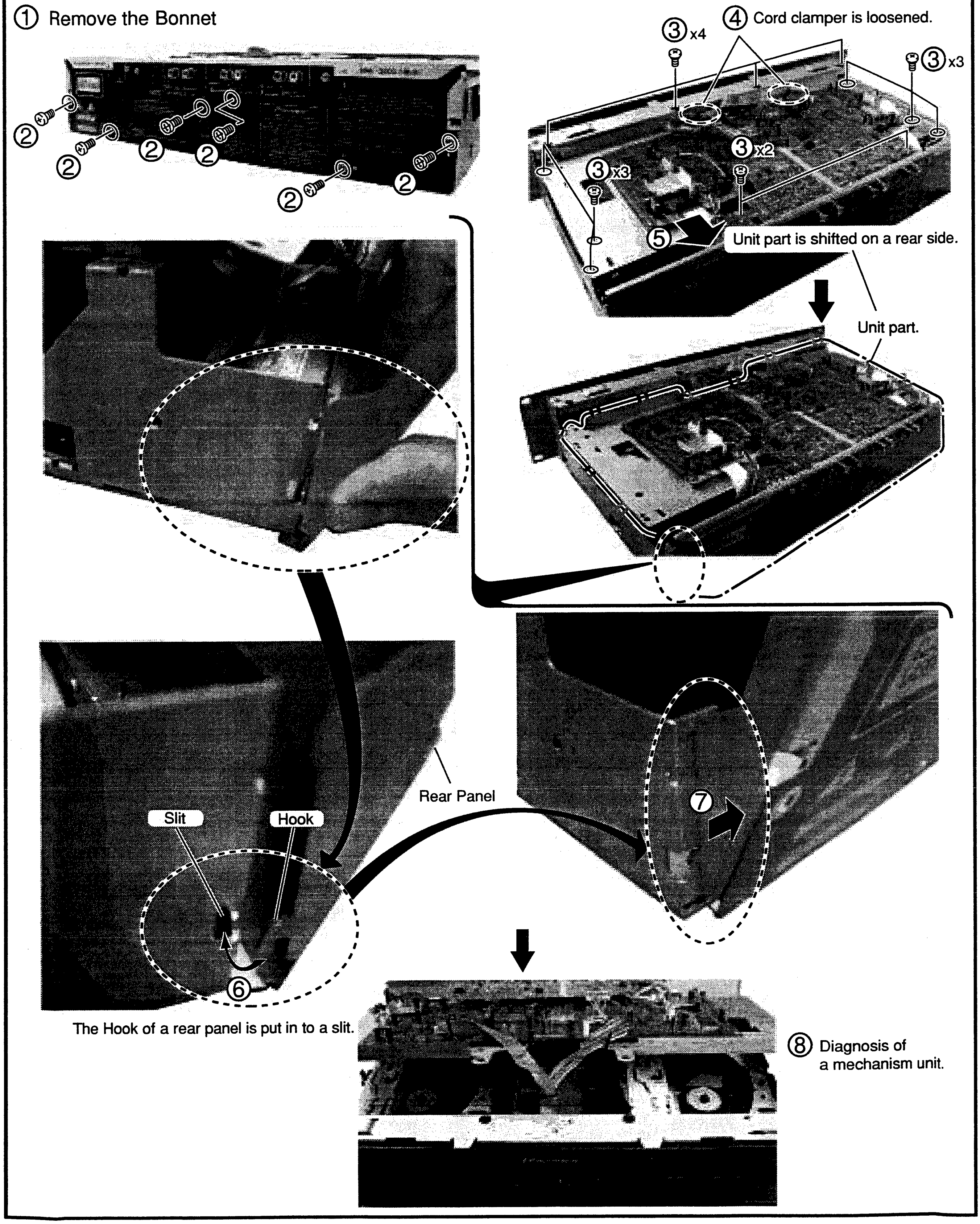

①
②
Bottom Palate
①
②
Bottom Palate
B PLAYER
A PLAYER
⑤
Short land
③
④
③
Float Spring R
(Silver)
⑦
⑤
⑥
④
Float Spring F
(Black)
④
Servo Mechanism Assy
④

[Caution in the Servo Mechanism Assy replacement]

- **When remove the Servo Mechanism Assy, short-circuit a LD Short land ⑤ before disconnecting a flexible cable from the connector.**
  When install the Servo Mechanism Assy, release the short-circuit of LD Short land ⑤ after connecting the flexible cable to the connector. (For LD fracture prevention)

- **Installing the Froat Spring F and Froat Spring R to the correct position.**
  Front side : Froat Spring F (Black) x2
  Rear side : Froat Spring R (Silver) x2

■ The Operation check method of a mechanism unit



① Remove the Bonnet

④ Cord clamper is loosened.

⑤ Unit part is shifted on a rear side.

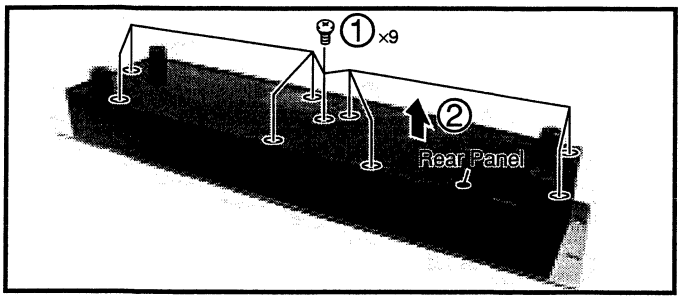
⑥ The Hook of a rear panel is put in to a slit.

⑧ Diagnosis of a mechanism unit.

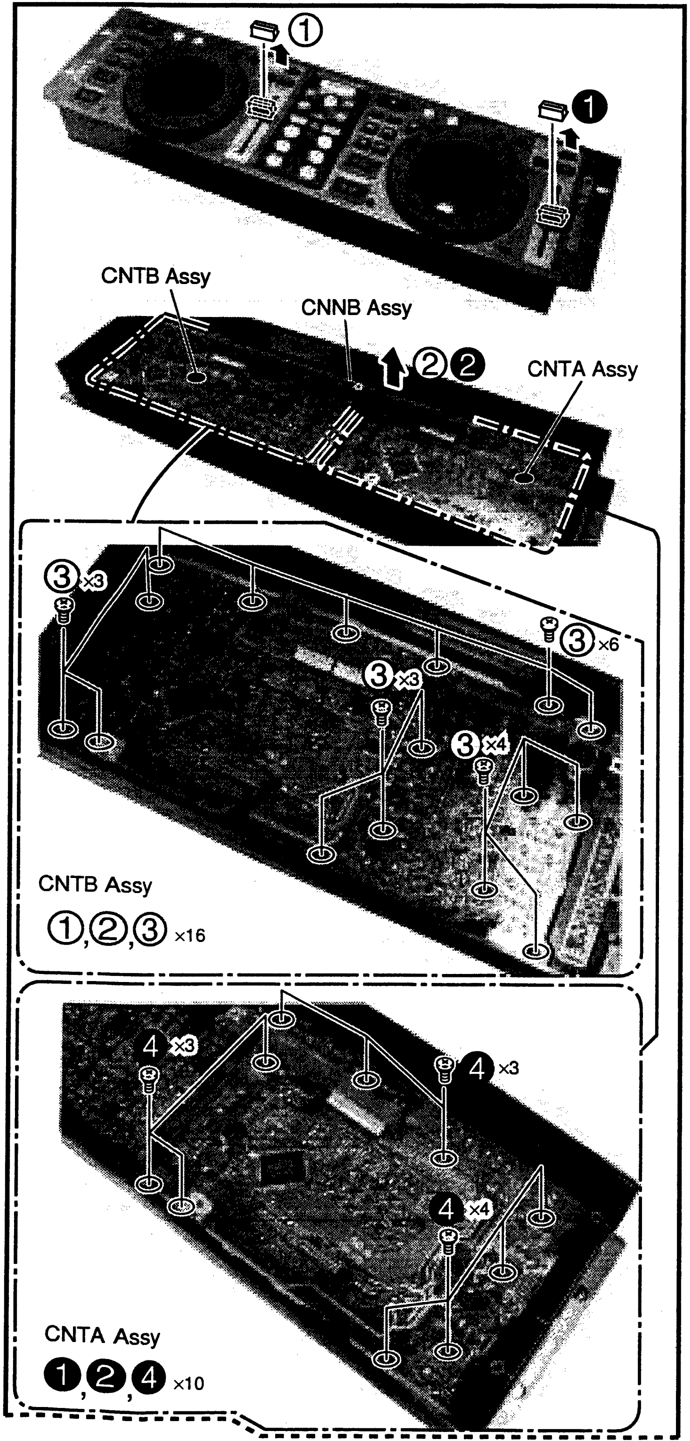
②
②
②
②
②
②
②
③x4
③x3
③x2
③x3
Unit part.
Rear Panel
Slit
Hook
⑦

(2) REMOTE CONTROLLER (CU-V163)

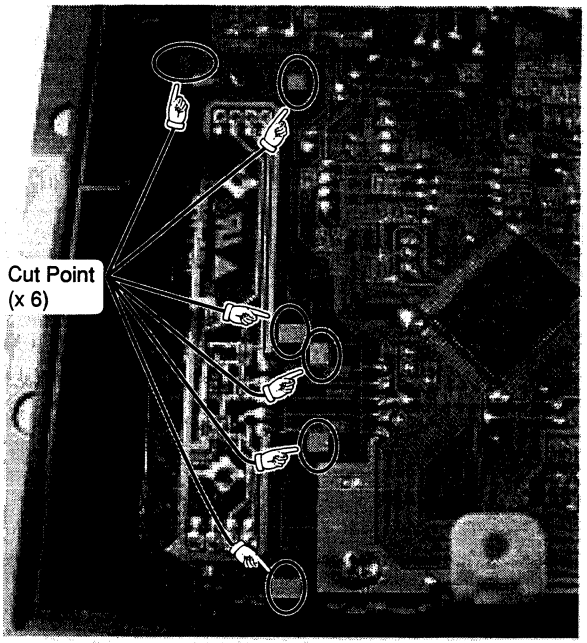
■ Rear Panel


①×9
②
Rear Panel

■ CNTA, CNTB Assy


①
❶
CNTB Assy
CNNB Assy
②❷
CNTA Assy
③×3
③×6
③×3
③×4
CNTB Assy
①,②,③ ×16
4 ×3
4 ×3
4 ×4
CNTA Assy
❶,❷,❹ ×10

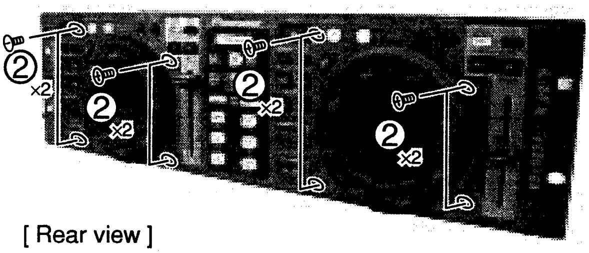
Note :
When cuts PC Board with a nipper and replaced slide VR, positioning becomes invalid. Please aline it by visual inspection when installs it. (Refer to the following diagram.)


Cut Point
(x 6)

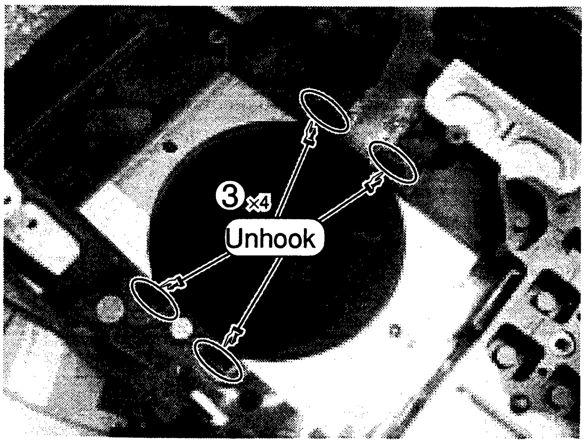
This illustration is CNTB Assy.

■ JOG Dial

① Remove the CNTA, CNTB and CNNB Assy

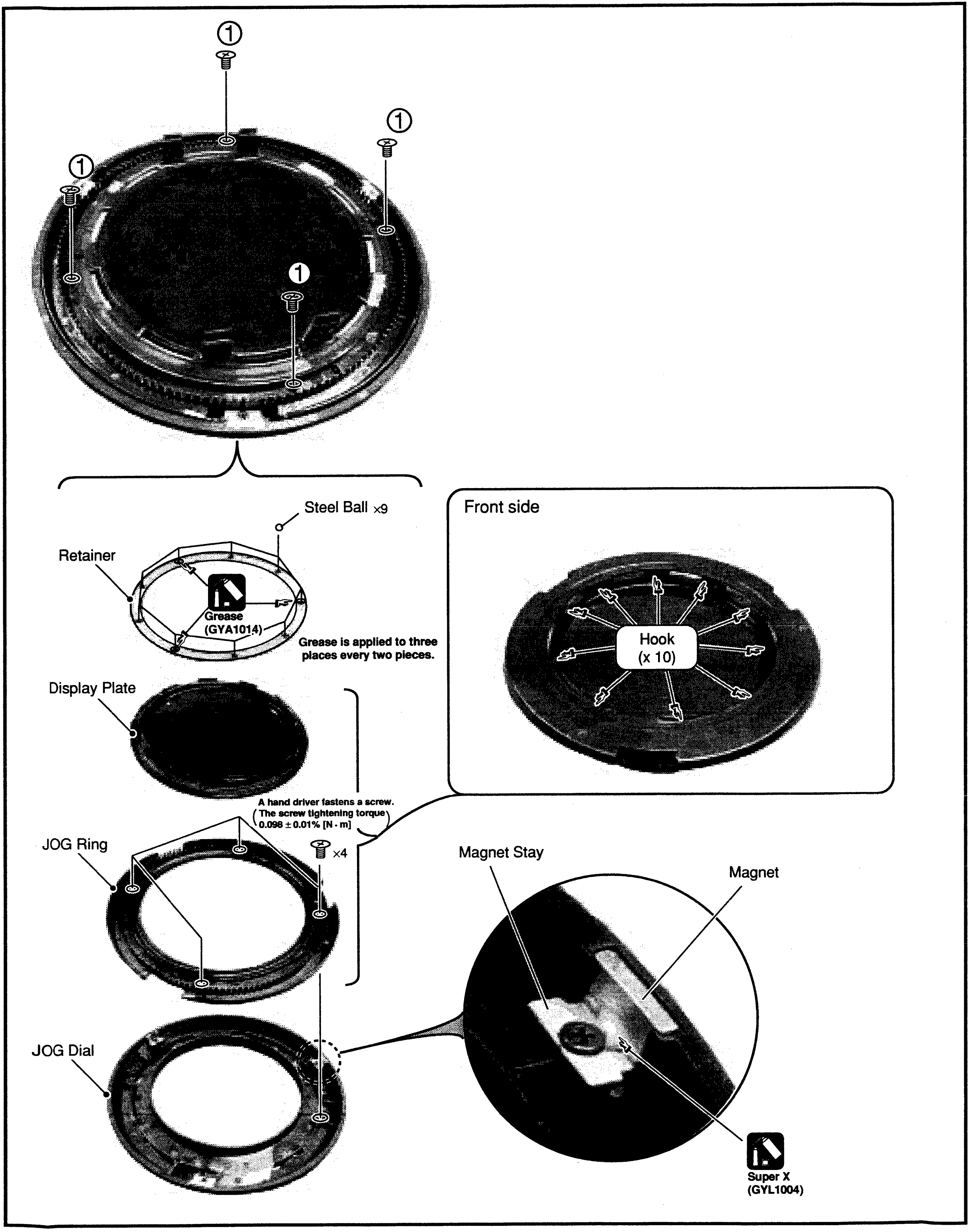


[Rear view]



④ Remove the Front Panel Assy

■ JOG Dial Section


①
①
①
❶
Steel Ball ×9
Retainer
Grease
(GYA1014)
Grease is applied to three places every two pieces.
Front side
Hook
(x 10)
Display Plate
A hand driver fastens a screw.
The screw tightening torque
0.098 ± 0.01% [N · m]
×4
JOG Ring
Magnet Stay
Magnet
JOG Dial
Super X
(GYL1004)

7.2 PARTS

7.2.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

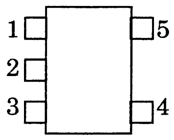
•List of IC

NJM2870F18, NJM2870F25, NJM2360M, PST994D, TC74VHC04FT, XC2S30-5TQ144C, TA2153FN, PD5764A, HD6417709AF100B

■ NJM2870F18 (MAIN ASSY : IC1406)

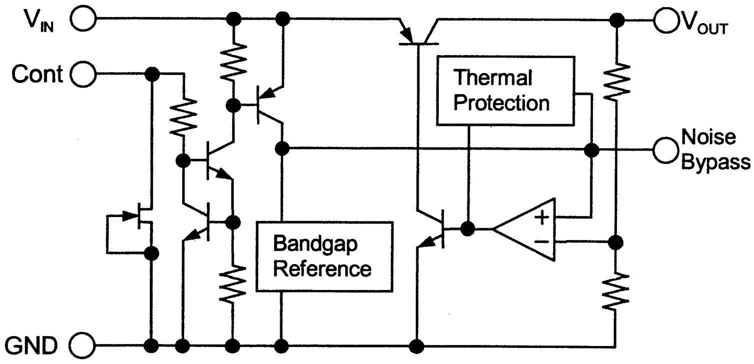
• Regulator IC

● Pin Arrangement



PIN FUNCTION
1. CONTROL (Active High)
2. GND
3. NOISE BYPASS
4. V_{OUT}
5. V_{IN}

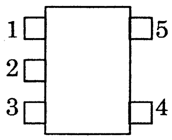
● Block Diagram


V_{IN}
Cont
GND
Thermal Protection
Bandgap Reference
+
−
V_{OUT}
Noise Bypass

■ NJM2870F25 (MAIN ASSY : IC1009)

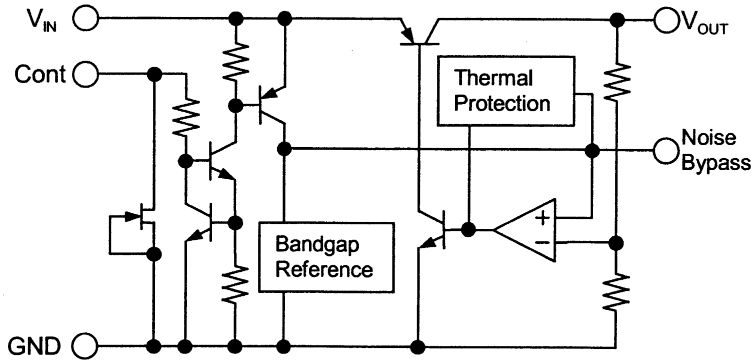
• Regulator IC

● Pin Arrangement



PIN FUNCTION
1. CONTROL (Active High)
2. GND
3. NOISE BYPASS
4. V_{OUT}
5. V_{IN}

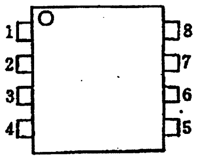
● Block Diagram


V_{IN}
Cont
GND
Thermal Protection
Bandgap Reference
+
−
V_{OUT}
Noise Bypass

■ NJM2360M (JACB ASSY : IC211)

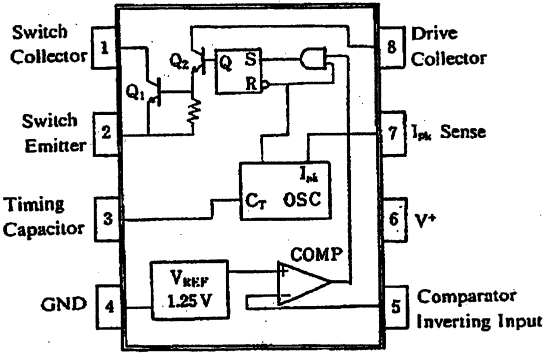
• DC-DC Convertor

● Pin Arrangement



PIN FUNCTION
1. C_S
2. E_S
3. C_T
4. GND
5. INV_{IN}
6. V^+
7. S_I
8. C_D

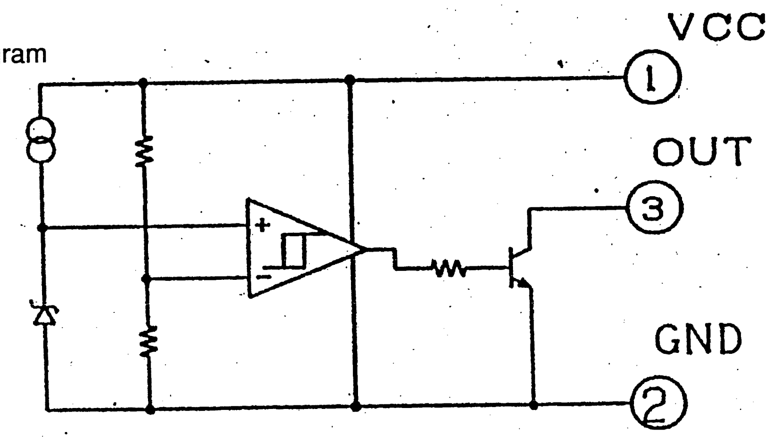
● Block Diagram


Switch Collector
1
Switch Emitter
2
Timing Capacitor
3
GND
4
Q₁
Q₂
Q
S
R
Ipk
CT OSC
COMP
VREF 1.25V
8
Drive Collector
7
Ipk Sense
6
V+
5
Comparator Inverting Input

■ PST994D (CNTB ASSY : IC502)

• Reset IC

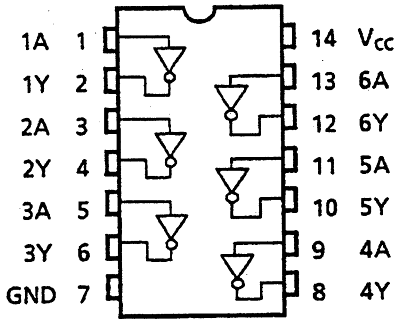
● Block Diagram


VCC
①
OUT
③
GND
②
+
−

■ TC74VHC04FT (MAIN ASSY : IC1437)

• Logic IC

● Pin Arrangement


1A 1
1Y 2
2A 3
2Y 4
3A 5
3Y 6
GND 7
14 Vcc
13 6A
12 6Y
11 5A
10 5Y
9 4A
8 4Y

(TOP VIEW)

■ XC2S30-5TQ144C (MAIN ASSY : IC1409)

- **PLD IC**

● Pin Name

Pin No.	Port Name	Pin Name
1	Vcco	Vcco
2	TCK	TCK
3	EX_CONT2_A	I/O
4	DAC1_MCLK	I/O
5	DAC1_BCK	I/O,Vref
6	DAC1_LRCK	I/O
7	DAC1_DATA	I/O
8	GND	GND
9	Vccint	Vccint
10	DAC2_MCLK	I/O
11	DAC2_BCK	I/O
12	DAC2_LRCK	I/O,Vref
13	DAC2_DATA	I/O
14	Vccint	Vccint
15	CKIO	GCK3
16	VCCO	Vcco
17	GND	GND
18	PLLCLK	GCK2
19	GND	I/O
20	EX_CONT1B	I/O
21	EX_CONT2B	I/O,Vref
22	SBOK2	I/O
23	SUBQ2	I/O
24	Vccint	Vccint
25	GND	GND
26	SBSY2	I/O
27		I/O
28	SFSY2	I/O,Vref
29	LRCK2	I/O
30	BCK2	I/O(WRITE)
31	ADATA2	I/O(CS)
32	TDI	TDI
33	GND	GND
34	TDO	TDO
35	Vcco	Vcco
36	Vcco	Vcco
37	CCLK	CCLK
38		I/O(DOUT,BUSY)
39	DIN	I/O(DIN,D0)
40	BCLKB	I/O
41	DBCLKB	I/O,Vref
42		I/O
43	SDI0B	I/O
44	D0	I/O(D1)
45	GND	GND
46	D1	I/O(D2)
47	D2	I/O
48	D3	I/O,Vref
49	D4	I/O(D3)
50	D5	I/O

Pin No.	Port Name	Pin Name
51	D6	I/O,IRDY
52	GND	GND
53	VCCO	VCCO
54	D7	I/O,Trdy
55	Vccint	Vccint
56	A1	I/O
57	A2	I/O(D4)
58	MREQB	I/O,Vref
59	XRD	I/O
60	XWE	I/O(D5)
61	GND	GND
62	MREQA	I/O(D6)
63	BCLKA	I/O
64		I/O
65	DSP1BCK	I/O,Vref
66	DBCLKA	I/O
67	DSP1LRCK	I/O(D7)
68	INIT	I/O(INIT)
69	XPROGRAM	PROGRAM
70	Vcco	Vcco
71	Vcco	Vcco
72	DONE	DONE
73	GND	GND
74	SDI0A	I/O
75	SDI1A	I/O
76	SDI2A	I/O
77	SDI2B	I/O,Vref
78	DSP2DATA	I/O
79	DSP1DATA	I/O
80	SDI1B	I/O
81	GND	GND
82	Vccint	Vccint
83	DISC_LED_A	I/O
84	DISC_LED_B	I/O
85	G2	I/O,Vref
86	A2	I/O
87	GND	I/O
88	ACLK2	GCK0
89	GND	GND
90	Vcco	Vcco
91	ACLK1	GCK1
92	Vccint	Vccint
93	G1	I/O
94	A1	I/O,Vref
95		I/O
96	XDACK1	I/O
97	Vccint	Vccint
98	GND	GND
99	XDACK0	I/O
100	XRST	I/O

Pin No.	Port Name	Pin Name
101	NC	I/O
102	XCS5	I/O,Vref
103	XCS2	I/O
104	STATUS	STATUS
105	PWDN	PWDN
106	M2	M2
107	VCCO	Vcco
108	VCCO	Vcco
109	M0	M0
110	GND	GND
111	M1	M1
112	A25	I/O
113	A24	I/O
114	A23	I/O
115	A3	I/O,Vref
116	NC	I/O
117	D8	I/O
118	D9	I/O
119	GND	GND
120	D10	I/O
121	D11	I/O
122	D12	I/O,Vref
123	D13	I/O
124	D14	I/O
125	Vccint	Vccint
126	D15	I/O,TRDY
127	Vcco	Vcco
128	GND	GND
129	RD/XWR	I/O,IRDY
130	XDREQ1	I/O
131	XDREQ0	I/O
132	SUBQ1	I/O,Vref
133	SBSY1	I/O
134		I/O
135	GND	GND
136	SBOK1	I/O
137	SFSY1	I/O
138	ADATA1	I/O
139	LRCK1	I/O,Vref
140	BCK1	I/O
141	EX_CONT1_A	I/O
142	TMS	TMS
143	GND	GND
144	VCCO	VCCO

● Pin Function (1/2)

PLL

Pin No.	Pin Name	I/O	Description	Connection Point
18	PLLCK	I	16. 9344MHz Standard Frequency Input	Standard Frequency area
91	ACLK1	I	VCO input for CD1	VCO area
93	G1	O	Phase comparison machine output for CD1	VCO area
94	A1	O	Phase comparison machine output for CD1	VCO area
88	ACLK2	I	VCO iinput for CD2	VCO area
85	G2	O	PLL output for CD2	VCO area
86	A2	O	PLL output for CD2	VCO area

DSP I/F

Pin No.	Pin Name	I/O	Description	Connection Point
62	MREQA	I	Ach REQ signal CD1	DSP Ach
63	BCLKA	O	Bit clock output terminal, clock for audio data	DSP Ach
66	DBCLKA	O	Word clock output terminal	DSP Ach
74	SDI0A	O	Serial audio data output terminal 0	DSP Ach
75	SDI1A	O	Serial audio data output terminal 1	DSP Ach
76	DSI2A	O	Data lead	DSP Ach
58	MREQB	I	Bch REQ signal CD2	DSP Ach
40	BCLKB	O	bit clock output terminal, clock for audio data	DSP Ach
41	DBCLKB	O	Word clock output terminal	DSP Ach
43	SDI0B	O	Serial audio data output terminal 0	DSP Ach
80	SDI1B	O	Serial audio data output terminal 1	DSP Ach
77	DSI2B	O	Data lead	DSP Ach

AUDIO INPUT I/F

Pin No.	Pin Name	I/O	Description	Connection Point
140	BCK1	I	bit clock for audio input from CD1	D Servo IC1
139	LRCK1	I	LR clock for audio input from CD1	D Servo IC1
138	ADATA1	I	audio data from CD1	D Servo IC1
133	S BSY1	I	sub code sync. from CD1	D Servo IC1
137	S FSY1	I	frame sync. from CD1	D Servo IC1
132	S UBQ1	I	sub code Q data from CD1	D Servo IC1
136	S BOK1	I	sub code Q data CRCC judging result input terminal from CD1	D Servo IC1
30	BCK2	I	bit clock for audio input from CD2	D Servo IC2
29	LRCK2	I	R clock for audio input from CD2	D Servo IC2
31	ADATA2	I	audio data from CD2	D Servo IC2
26	S BSY2	I	sub code sync. from CD2	D Servo IC2
28	S FSY2	I	frame sync. from CD2	D Servo IC2
23	S UBQ2	I	sub code Q data from CD2	D Servo IC2
22	S BOK2	I	sub code Q data CRCC judging result input terminal from CD2	D Servo IC2

AUDIO DATA CHANGE

Pin No.	Pin Name	I/O	Description	Connection Point
65	DSP1BCK	I	audio data is changed	DSP
67	DSP1LRCK	I	audio data is changed	DSP
79	DSP1DATA	I	audio data is changed	DSP
78	DSP2DATA	I	audio data is changed	DSP

DAC I/F

Pin No.	Pin Name	I/O	Description	Connection Point
4	DAC1_MCLK	O	clock for DAC1	DAC1
5	DAC1_BCK	O	bit clock for DAC1	DAC1
6	DAC1_LRCK	O	LR clock for DAC1	DAC1
7	DAC1_DATA	O	data for DAC1	DAC1
10	DAC2_MCLK	O	data for DAC2	DAC2
11	DAC2_BCK	O	bit clock for DAC2	DAC2
12	DAC2_LRCK	O	LR clock for DAC2	DAC2
13	DAC2_DATA	O	data for DAC2	DAC2

● Pin Function (2/2)

CPU I/F

Pin No.	Pin Name	I/O	Description	Connection Point
102	XCS5	I	CH input for address decoding	SH3
103	XCS2	I	CH input for address decoding	SH3
112	A25	I	CH input for address decoding	SH3
113	A24	I	CH input for address decoding	SH3
114	A23	I	CH input for address decoding	SH3
115	A3	I	address input terminal for CPU	SH3
57	A2	I	address input terminal for CPU	SH3
56	A1	I	address input terminal for CPU	SH3
126	D15	I/O	address input terminal for CPU	SH3
124	D14	I/O	address input terminal for CPU	SH3
123	D13	I/O	address input terminal for CPU	SH3
122	D12	I/O	address input terminal for CPU	SH3
121	D11	I/O	address input terminal for CPU	SH3
120	D10	I/O	address input terminal for CPU	SH3
118	D9	I/O	address input terminal for CPU	SH3
117	D8	I/O	address input terminal for CPU	SH3
54	D7	I/O	address input terminal for CPU	SH3
51	D6	I/O	address input terminal for CPU	SH3
50	D5	I/O	address input terminal for CPU	SH3
49	D4	I/O	address input terminal for CPU	SH3
48	D3	I/O	address input terminal for CPU	SH3
47	D2	I/O	address input terminal for CPU	SH3
46	D1	I/O	address input terminal for CPU	SH3
44	D0	I/O	address input terminal for CPU	SH3
130	XDREQ1	O	data request	SH3
131	XDREQ0	O	data request	SH3
96	XDACK1	I	data akunoridge	SH3
99	XDACK0	I	data akunoridge	SH3
60	XWE	I	write enable signal	SH3
59	XRD	I	read strobe signal	SH3
129	RD/XWR	I	read write signal	SH3
15	CKIO	I	system clock	SH3
100	XRST	I	system reset	SH3

CPU I/O EXTENSION

Pin No.	Pin Name	I/O	Description	Connection Point
141	EX_CONT1_A	I/O		
3	EX_CONT2_A	I		
20	EX_CONT1B	I/O		
21	EX_CONT2B	I		
83	DISC_LED_A	O		
84	DISC_LED_B	O		

CONFIGURATION

Pin No.	Pin Name	I/O	Description
109	M0	I	
111	M1	I	
106	M2	I	
69	XPROGRAM	O	
39	DIN	I	
68	XINIT	O	
37	CCLK	I/O	
72	DONE	O	

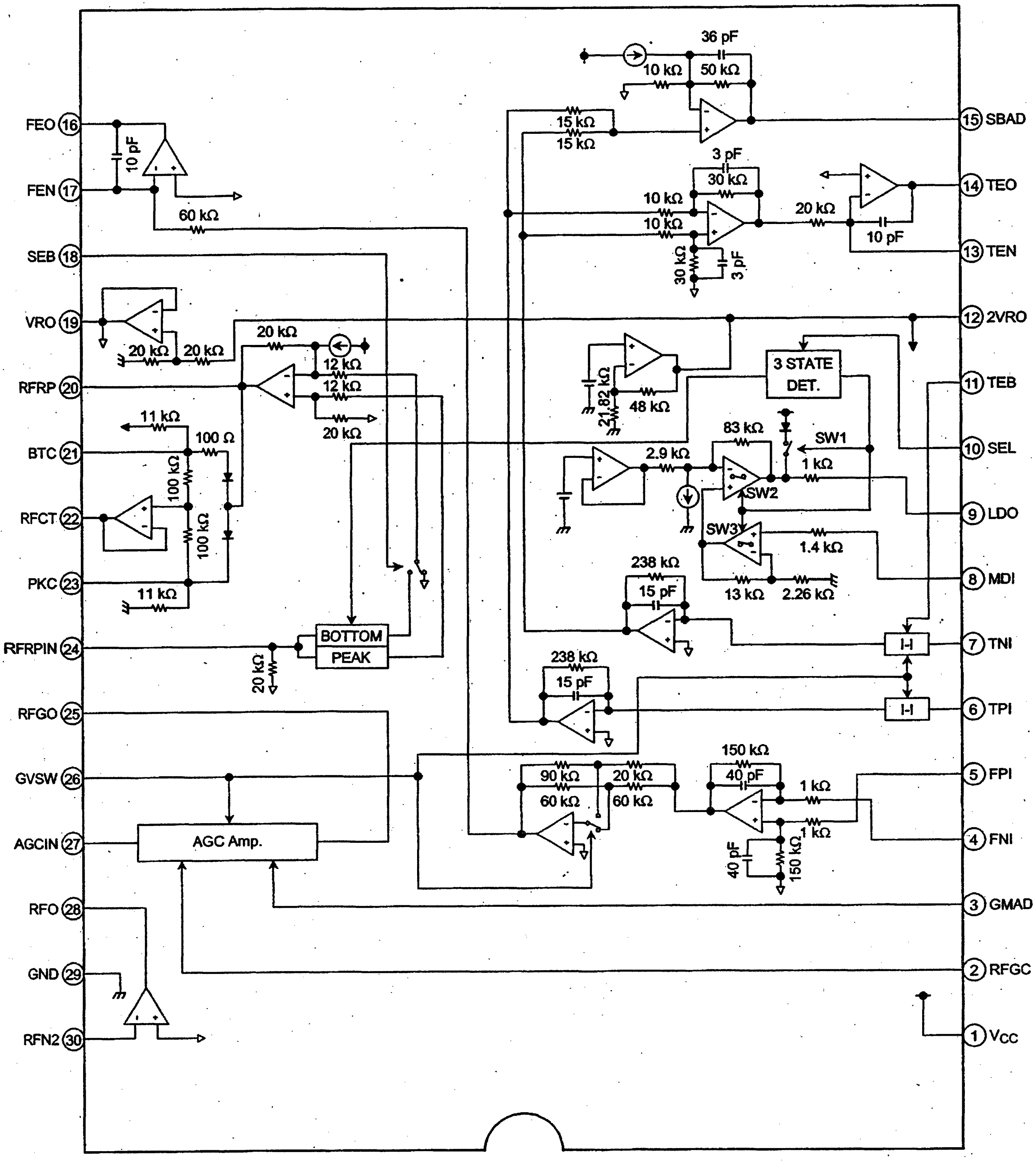
OTHERS

Pin No.	Pin Name	I/O	Description
9, 14, 24, 55 82, 92, 97, 125	Vccint		2.5V
1, 35, 36, 53, 70 71, 90, 107, 108 127,144	Vccco		3.3V
8, 17, 19, 25, 33 45, 52, 61, 73, 81 87, 98, 110, 135 143	GND		GND

■ TA2153FN (MAIN ASSY : IC1003, IC1010)

- **RF Amp IC**

● Block Diagram


FEO ⑯
FEN ⑰
SEB ⑱
VRO ⑲
RFRP ⑳
BTC ㉑
RFCT ㉒
PKC ㉓
RFRPIN ㉔
RFGO ㉕
GVSW ㉖
AGCIN ㉗
RFO ㉘
GND ㉙
RFN2 ㉚
⑮ SBAD
⑭ TEO
⑬ TEN
⑫ 2VRO
⑪ TEB
⑩ SEL
⑨ LDO
⑧ MDI
⑦ TNI
⑥ TPI
⑤ FPI
④ FNI
③ GMAD
② RFGC
① Vcc
10 pF
60 kΩ
20 kΩ
20 kΩ
20 kΩ
12 kΩ
12 kΩ
20 kΩ
11 kΩ
100 Ω
100 kΩ
100 kΩ
11 kΩ
20 kΩ
BOTTOM
PEAK
AGC Amp.
36 pF
10 kΩ
50 kΩ
15 kΩ
15 kΩ
3 pF
30 kΩ
10 kΩ
10 kΩ
30 kΩ
3 pF
20 kΩ
10 pF
21.82 kΩ
48 kΩ
3 STATE DET.
83 kΩ
SW1
2.9 kΩ
1 kΩ
SW2
SW3
1.4 kΩ
238 kΩ
15 pF
13 kΩ
2.26 kΩ
I-I
238 kΩ
15 pF
I-I
150 kΩ
90 kΩ
20 kΩ
60 kΩ
60 kΩ
40 pF
1 kΩ
1 kΩ
40 pF
150 kΩ

- Pin Function (1/2)

<table>
<tr><th>Pin No.</th><th>Symbol</th><th>I/O</th><th>Function Description</th><th>Remarks</th></tr>
<tr><td>1</td><td>V_{CC}</td><td>—</td><td>Power supply input terminal.</td><td>—</td></tr>
<tr><td>2</td><td>RFGC</td><td>I</td><td>RF amplitude adjustment control signal input terminal.
Controlled by 3-PWM signals.
(PWM carrier = 88.2 kHz)</td><td>3 signals input.
(2VRO, VRO, GND)</td></tr>
<tr><td>3</td><td>GMAD</td><td>I</td><td>Open loop gain adjustment terminal for AGC amp.</td><td>(Note1)</td></tr>
<tr><td>4</td><td>FNI</td><td>I</td><td>Main beam I-V amp input terminal.</td><td>Connected to pin diode output B + D (through resistor).</td></tr>
<tr><td>5</td><td>FPI</td><td>I</td><td>Main beam I-V amp input terminal.</td><td>Connected to pin diode output A + C (through resistor).</td></tr>
<tr><td>6</td><td>TPI</td><td>I</td><td>Sub beam I-V amp input terminal.</td><td>Connected to pin diode output F.</td></tr>
<tr><td>7</td><td>TNI</td><td>I</td><td>Sub beam I-V amp input terminal.</td><td>Connected to pin diode output E.</td></tr>
<tr><td>8</td><td>MDI</td><td>I</td><td>Monitor photo diode amp input terminal.</td><td>Connected to monitor photo diode.</td></tr>
<tr><td>9</td><td>LDO</td><td>O</td><td>Laser diode amp input terminal.</td><td>Connected to laser diode control circuit.</td></tr>
<tr><td>10</td><td>SEL</td><td>I</td><td>Laser diode control signal input terminal and APC circuit ON/OFF control signal terminal.
<table>
<tr><th>SEL Level</th><th>APC Circuit</th><th>LDO</th><th>Detect Frequency</th></tr>
<tr><td>GND</td><td>OFF</td><td>Connected to V_{CC} through resister (1 kΩ)</td><td>Low</td></tr>
<tr><td>HiZ</td><td>ON</td><td>Control signal output</td><td>Low</td></tr>
<tr><td>V_{CC}</td><td>ON</td><td>Control signal output</td><td>High</td></tr>
</table></td><td>3 signals input.
(V_{CC}, HiZ, GND)</td></tr>
<tr><td>11</td><td>TEB</td><td>I</td><td>Tracking error balance adjustment signal input terminal.
Controlled by 3-PWM signal.
(PWM carrier = 88.2 kHz)</td><td>3 signals input.
(2VRO, VRO, GND)</td></tr>
<tr><td>12</td><td>2VRO</td><td>O</td><td>Reference voltage (2VRO) output terminal.
2VRO = 4.2 V when V_{CC} = 5 V</td><td>—</td></tr>
<tr><td>13</td><td>TEN</td><td>I</td><td>TE amp negative input terminal.</td><td>Connected to TEO through feedback resistor.</td></tr>
<tr><td>14</td><td>TEO</td><td>O</td><td>TE error signal output terminal.</td><td>—</td></tr>
<tr><td>15</td><td>SBAD</td><td>O</td><td>Sub beam adder signal output terminal.</td><td>—</td></tr>
<tr><td>16</td><td>FEO</td><td>O</td><td>Focus error signal output terminal.</td><td>—</td></tr>
<tr><td>17</td><td>FEN</td><td>I</td><td>FE amp negative input terminal.</td><td>Connected to FEO through feedback resistor.</td></tr>
<tr><td>18</td><td>SEB</td><td>I</td><td>RFRP output circuit switching terminal.
<table>
<tr><th>SEB Level</th><th>Bottom Detection</th><th>Peak Detection</th></tr>
<tr><td>GND</td><td>ON</td><td>ON</td></tr>
<tr><td>V_{CC}</td><td>OFF</td><td>ON</td></tr>
</table></td><td>Low (GND) is for normal use.</td></tr>
<tr><td>19</td><td>VRO</td><td>O</td><td>Reference signal (VRO) output terminal.
VRO = 2.1 V when V_{CC} = 5 V</td><td>—</td></tr>
<tr><td>20</td><td>RFRP</td><td>O</td><td>Track count signal output terminal.</td><td>—</td></tr>
<tr><td>21</td><td>BTC</td><td>I</td><td>Time constant adjustment terminal for bottom detection.</td><td>Adjusted by capacitance.</td></tr>
</table>

- Pin Function (2/2)

Pin No.	Symbol	I/O	Function Description	Remarks
22	RFCT	O	RFRP signal center level output terminal.	—
23	PKC	I	Time constant adjustment terminal for peak detection.	Adjusted by capacitance.
24	RFRPIN	I	Input terminal for track count signal output amp.	—
25	RFGO	O	Output terminal for RF signal amplitude adjustment amp.	—
26	GVSW	I	Amp (AGC, FE, TE) gain switching terminal. GVSW / Mode GND / CD-RW HiZ / Normal V_{CC} / Normal	Low (GND) is for 5 times gain.
27	AGCIN	I	Input terminal for RF signal amplitude adjustment amp.	Connected to RFO through capacitance.
28	RFO	O	Output terminal RF signal amp.	—
29	GND	—	Ground terminal.	—
30	RFN2	I	Input terminal for RF signal amp.	Connected to pin-diode output A + B + C + D (through resistor).

Note1: Pin3 (GMAD) is gm adjustment terminal for AGC amp by applying a voltage (between 1.5 V and 4.2 V).
If pin3 (GMAD) is open, voltage of this terminal is fixed VR by IC interior.
Characteristic of frequency (open-loop characteristic) and voltage is as below.

■ PD5764A (CNTB ASSY : IC501)

• Micro computer (Master CPU)

● Pin Function

Pin No	Pin Name	I/O	Discription	Pin No	Pin Name	I/O	Discription
1	KEY5	I	Key Input	51	S22	O	FL Disply Segment 1: Light up
2	KEY4	I	Key Input	52	S21	O	FL Disply Segment 1: Light up
3	KEY3	I	Key Input	53	S20	O	FL Disply Segment 1: Light up
4	KEY2	I	Key Input	54	S19	O	FL Disply Segment 1: Light up
5	KEY1	I	Key Input	55	S18	O	FL Disply Segment 1: Light up
6	KEY0	I	Key Input	56	S17	O	FL Disply Segment 1: Light up
7	LED7	O	BPM SYNC 1: Light up	57	S16	O	FL Disply Segment 1: Light up
8	LED6	O	RELAY PLAY 1: Light up	58	S15	O	FL Disply Segment 1: Light up
9	NC	O	-	59	S14	O	FL Disply Segment 1: Light up
10	LED4	O	PLAY/ PAUSE 1: Light up	60	S13	O	FL Disply Segment 1: Light up
11	LED3	O	CUE 1: Light up	61	S12	O	FL Disply Segment 1: Light up
12	LED2	O	IN/ REALTIME CUE 1: Light up	62	S11	O	FL Disply Segment 1: Light up
13	LED1	O	OUT/ OUT ADJAST 1: Light up	63	S10	O	FL Disply Segment 1: Light up
14	LED0	O	MT 1: Light up	64	S9	O	FL Disply Segment 1: Light up
15	NC	O	-	65	S8	O	FL Disply Segment 1: Light up
16	NC	O	-	66	S7	O	FL Disply Segment 1: Light up
17	CNVss	-		67	S6	O	FL Disply Segment 1: Light up
18	XRESET	I		68	S5	O	FL Disply Segment 1: Light up
19	NC	O	-	69	S4	O	FL Disply Segment 1: Light up
20	NC	O	-	70	S3	O	FL Disply Segment 1: Light up
21	GND	-	GND	71	S2	O	FL Disply Segment 1: Light up
22	XIN	I	4MHz	72	S1	O	FL Disply Segment 1: Light up
23	XOUT	O	4MHz	73	NC	O	-
24	Vcc	-	+5V	74	NC	O	-
25	LED15	O	HOT REC : A 1: Light up	75	NC	O	-
26	LED14	O	HOT CUE1 : A 1: Light up	76	G9	O	FL Disply Grid 1: Light up
27	LED13	O	HOT CUE2 : A 1: Light up	77	G1	O	FL Disply Grid 1: Light up
28	LED12	O	HOT CUE3 : A 1: Light up	78	G12	O	FL Disply Grid 1: Light up
29	LED11	O	HOT REC : B 1: Light up	79	G13	O	FL Disply Grid 1: Light up
30	LED10	O	HOT CUE1 : B 1: Light up	80	G8	O	FL Disply Grid 1: Light up
31	LED9	O	HOT CUE2 : B 1: Light up	81	G10	O	FL Disply Grid 1: Light up
32	LED8	O	HOT CUE3 : B 1: Light up	82	G11	O	FL Disply Grid 1: Light up
33	XUNIT	I	-	83	G2	O	FL Disply Grid 1: Light up
34	XSTEP	I	-	84	G3	O	FL Disply Grid 1: Light up
35	TxD	O	Communication with a main part.	85	G4	O	FL Disply Grid 1: Light up
36	RxD	I	Communication with a main part.	86	G5	O	FL Disply Grid 1: Light up
37	S36	O	FL Disply Segment 1: Light up	87	G6	O	FL Disply Grid 1: Light up
38	S35	O	FL Disply Segment 1: Light up	88	G7	O	FL Disply Grid 1: Light up
39	S34	O	FL Disply Segment 1: Light up	89	VLOAD	-	VLOAD
40	S33	O	FL Disply Segment 1: Light up	90	SINE1	I	Automatic transmission Input.
41	S32	O	FL Disply Segment 1: Light up	91	SOUT1	O	Automatic transmission Output.
42	S31	O	FL Disply Segment 1: Light up	92	SCLK11	I	Automatic transmission Clock.
43	S30	O	FL Disply Segment 1: Light up	93	TYPE M/XS	I	High: Master CPU Mode.
44	S29	O	FL Disply Segment 1: Light up	94	SBUSY1	I	Automatic transmission control line
45	S28	O	FL Disply Segment 1: Light up	95	XSRDY1	O	Automatic transmission control line.
46	S27	O	FL Disply Segment 1: Light up	96	XRESET_S	O	Slave CPU Reset output 0: Reset
47	S26	O	FL Disply Segment 1: Light up	97	AGND	-	GND
48	S25	O	FL Disply Segment 1: Light up	98	AVREF	-	+5V
49	S24	O	FL Disply Segment 1: Light up	99	TEMPO_REF	I	TEMPO Slider Input.
50	S23	O	FL Disply Segment 1: Light up	100	TEMPO	I	TEMPO Slider Input.

■ PD5764A (CNTA ASSY : IC301)

• Micro computer (Slave CPU)

● Pin Function

Pin No	Pin Name	I/O	Discription	Pin No	Pin Name	I/O	Discription
1	NC	O	-	51	S22	O	FL Disply Segment 1: Light up
2	NC	O	-	52	S21	O	FL Disply Segment 1: Light up
3	NC	O	-	53	S20	O	FL Disply Segment 1: Light up
4	NC	O	-	54	S19	O	FL Disply Segment 1: Light up
5	KEY1	I	-	55	S18	O	FL Disply Segment 1: Light up
6	KEY0	I	-	56	S17	O	FL Disply Segment 1: Light up
7	NC	O	-	57	S16	O	FL Disply Segment 1: Light up
8	NC	O	-	58	S15	O	FL Disply Segment 1: Light up
9	NC	O	-	59	S14	O	FL Disply Segment 1: Light up
10	LED4	O	PLAY/ PAUSE 1: Light up	60	S13	O	FL Disply Segment 1: Light up
11	LED3	O	CUE 1: Light up	61	S12	O	FL Disply Segment 1: Light up
12	LED2	O	IN/ REALTIME CUE 1: Light up	62	S11	O	FL Disply Segment 1: Light up
13	LED1	O	OUT/ OUT ADJAST 1: Light up	63	S10	O	FL Disply Segment 1: Light up
14	LED0	O	MT 1: Light up	64	S9	O	FL Disply Segment 1: Light up
15	JOG1A	I	A PLAYER JOG Input	65	S8	O	FL Disply Segment 1: Light up
16	JOG1B	I	B PLAYER JOG Input	66	S7	O	FL Disply Segment 1: Light up
17	CNVss	-	-	67	S6	O	FL Disply Segment 1: Light up
18	XRESET	I	-	68	S5	O	FL Disply Segment 1: Light up
19	JOG0A	I	A PLAYER JOG Input	69	S4	O	FL Disply Segment 1: Light up
20	JOG0B	I	B PLAYER JOG Input	70	S3	O	FL Disply Segment 1: Light up
21	GND	-	-	71	S2	O	FL Disply Segment 1: Light up
22	XIN	I	4MHz	72	S1	O	FL Disply Segment 1: Light up
23	XOUT	O	4MHz	73	NC	O	-
24	Vcc	-	+5V	74	NC	O	-
25	NC	O	-	75	NC	O	-
26	NC	O	-	76	G9	O	FL Disply Grid 1: Light up
27	NC	O	-	77	G1	O	FL Disply Grid 1: Light up
28	NC	O	-	78	G12	O	FL Disply Grid 1: Light up
29	INT3	I	B PLAYER JOG Trailing edge.	79	G13	O	FL Disply Grid 1: Light up
30	INT2	I	B PLAYER JOG leading edge.	80	G8	O	FL Disply Grid 1: Light up
31	INT1	I	A PLAYER JOG Trailing edge.	81	G10	O	FL Disply Grid 1: Light up
32	INT0	I	A PLAYER JOG leading edge.	82	G11	O	FL Disply Grid 1: Light up
33	NC	I	-	83	G2	O	FL Disply Grid 1: Light up
34	NC	I	-	84	G3	O	FL Disply Grid 1: Light up
35	NC	O	-	85	G4	O	FL Disply Grid 1: Light up
36	NC	I	-	86	G5	O	FL Disply Grid 1: Light up
37	S36	O	FL Disply Segment 1: Light up	87	G6	O	FL Disply Grid 1: Light up
38	S35	O	FL Disply Segment 1: Light up	88	G7	O	FL Disply Grid 1: Light up
39	S34	O	FL Disply Segment 1: Light up	89	VLOAD	-	VLOAD
40	S33	O	FL Disply Segment 1: Light up	90	SINE1	I	Automatic transmission Input.
41	S32	O	FL Disply Segment 1: Light up	91	SOUT1	O	Automatic transmission Output.
42	S31	O	FL Disply Segment 1: Light up	92	SCLK11	O	Automatic transmission Clock.
43	S30	O	FL Disply Segment 1: Light up	93	TYPE M/XS	I	High: Master CPU Mode
44	S29	O	FL Disply Segment 1: Light up	94	SBUSY1	O	Automatic transmission control line.
45	S28	O	FL Disply Segment 1: Light up	95	XSRDY1	I	Automatic transmission control line.
46	S27	O	FL Disply Segment 1: Light up	96	NC	O	-
47	S26	O	FL Disply Segment 1: Light up	97	AGND	-	GND
48	S25	O	FL Disply Segment 1: Light up	98	AVREF	-	+5V
49	S24	O	FL Disply Segment 1: Light up	99	TEMPO_REF	I	TEMPO Slider Input.
50	S23	O	FL Disply Segment 1: Light up	100	TEMPO	I	TEMPO Slider Input.

■ HD6417709AF100B (MAIN ASSY : IC1204)

• Micro computer

● Pin Function (1/4)

Pin No.	Port Name	Pin Name	I/O	Function
1	MD1	MD1	I	Pull up Clock mode setting
2	MD2	MD2	I	Pull down Clock mode setting
3	Vcc-RTC	Vcc-RTC	–	Power supply (1.8V) for RTC
4	XTAL2	XTAL2	O	NC Crystal resonator for internal RTC
5	EXTAL2	EXTAL2	I	Pull down Crystal resonator for internal RTC
6	Vss-RTC	Vss-RTC	–	Power supply (0V) for RTC
7	NMI	NMI	I	Pull down Non-maskable interrupt request
8	IRQ0/ IRL0/ PTH [0]	ZDET B	IN: pull-up	TC9495F zero detecting flag B (H for soundlessness)
9	IRQ0/ IRL0/ PTH [1]	ZDET A	IN: pull-up	TC9495F zero detecting flag B (H for soundlessness)
10	IRQ0/ IRL0/ PTH [2]	XZERO B	IN: pull-up	DAC zero detecting flag B (L for soundlessness)
11	IRQ0/ IRL0/ PTH [3]	XZERO A	IN: pull-up	DAC zero detecting flag A (L for soundlessness)
12	IRQ4/ PTH [4]	NC	(IN: pull-up)	
13	D31/ PTB [7]	BUSDR B	OUT: high	TC9495F I/F bus direction specification B (H: CPU to TC9495F)
14	D30/ PTB [6]	NC	OUT: high	
15	D29/ PTB [5]	NC	OUT: high	
16	D28/ PTB [4]	NC	OUT: high	
17	D27/ PTB [3]	XMR CHECK	OUT: high	
18	D26/ PTB [2]	XMR NG	OUT: high	
19	VssQ	VssQ	–	Power supply (0V) for I/O
20	D25/ PTB [1]	NC	OUT: high	
21	VccQ	VccQ	–	Power supply (3.3V) for I/O
22	D24/ PTB [0]	NC	OUT: high	
23	D23/ PTB [7]	NC	OUT: high	
24	D22/ PTB [6]	NC	OUT: high	
25	D21/ PTB [5]	NC	OUT: high	
26	D20/ PTB [4]	NC	OUT: high	
27	Vss	Vss	–	Power supply (0V)
28	D19/ PTA [3]	NC	OUT: high	
29	Vcc	Vcc	–	Power supply (1.8V)
30	D18/ PTA [2]	NC	OUT: high	
31	D17/ PTA [1]	NC	OUT: high	
32	D16/ PTA [0]	NC	OUT: high	
33	VssQ	VssQ	–	Power supply (0V) for I/O
34	D15	D15	Z	Data bus
35	VccQ	VccQ	–	Power supply (3.3V) for I/O
36	D14	D14	Z	Data bus
37	D13	D13	Z	Data bus
38	D12	D12	Z	Data bus
39	D11	D11	Z	Data bus
40	D10	D10	Z	Data bus
41	D9	D9	Z	Data bus
42	D8	D8	Z	Data bus
43	D7	D7	Z	Data bus
44	D6	D6	Z	Data bus
45	VssQ	VssQ	–	Power supply (0V) for I/O
46	D5	D5	Z	Data bus
47	VccQ	VccQ	–	Power supply (3.3V) for I/O
48	D4	D4	Z	Data bus
49	D3	D3	Z	Data bus
50	D2	D2	Z	Data bus
51	D1	D1	Z	Data bus
52	D0	D0	Z	Data bus

● Pin Function (2/4)

Pin No.	Port Name	Pin Name	I/O	Function
53	A0	A0	O	Address bus
54	A1	A1	O	Address bus
55	A2	A2	O	Address bus
56	A3	A3	O	Address bus
57	VssQ	VssQ	–	Power supply (0V) for I/O
58	A4	A4	O	Address bus
59	VccQ	VccQ	–	Power supply (3.3V) for I/O
60	A5	A5	O	Address bus
61	A6	A6	O	Address bus
62	A7	A7	O	Address bus
63	A8	A8	O	Address bus
64	A9	A9	O	Address bus
65	A10	A10	O	Address bus
66	A11	A11	O	Address bus
67	A12	A12	O	Address bus
68	A13	A13	O	Address bus
69	VssQ	VssQ	–	Power supply (0V) for I/O
70	A14	A14	O	Address bus
71	VccQ	VccQ	–	Power supply (3.3V) for I/O
72	A15	A15	O	Address bus
73	A16	A16	O	Address bus
74	A17	A17	O	Address bus
75	A18	A18	O	Address bus
76	A19	A19	O	Address bus
77	A20	A20	O	Address bus
78	A21	A21	O	Address bus
79	Vss	Vss	–	Power supply (0V)
80	A22	A22	O	Address bus
81	Vcc	Vcc	–	Power supply (1.8V)
82	A23	A23	O	Address bus
83	VssQ	VssQ	–	Power supply (0V) for I/O
84	A24	A24	O	Address bus
85	VccQ	VccQ	–	Power supply (3.3V) for I/O
86	A25	A25	O	Address bus
87	XBS/PTK [4]	NC	(OUT:high)	
88	XRD	XRD	O	Read strobe
89	XWE0/ DQMLL	XWE0/DQMLL	O	Write strobe
90	XWE1/ DQMLU/WE	XWE1/ DQMLU	O	Write strobe
91	XWE2/ DQMUL/ ICIORD/ PTK [6]	XWE2	O	NC
92	XWE3/ DQMUL/ ICIORD/ PTK [7]	XWE3	O	NC
93	RDXWR	RDWR	O	Read / Write
94	XAUDSYNC/ PTE [7]	AUDSYNC	OTHER	
95	VssQ	VssQ	–	Power supply (0V) for I/O
96	XCS0/ MCS [0]	CS0	O	Chip select 0 (for FLASH)
97	VccQ	VccQ	–	Power supply (3.3V) for I/O
98	XCS2/ PTK [0]	CS2	O	Chip select 2 (for FPGA)
99	XCS3/ PTK [1]	CS3	O	Chip select 3 (for SDRAM)
100	XCS4/ PTK [2]	CS4	O	Chip select 4 (for DSP)
101	XCS5/ CE1A/ PTK [3]	CS5	O	Chip select 5 (connect to FPGA)
102	XCS6/ CE1B	CS6	O	NC
103	XCE2A/ PTE [4]	LOADOUT B	OUT:high	Loading motor control B (Eject direction moves with Low)
104	XCE2B/ PTE [5]	LOADIN B	OUT:high	Loading motor control B (Lead-in direction moves with Low)

● Pin Function (3/4)

Pin No	Port Name	Pin Name	I/O	Function
105	CKE/ PTK [5]	CKE	O	CK enable (SDRAM)
106	XRAS3L/PTJ [0]	RAS3L	O	RAS3L (SDRAM)
107	XRAS2L/PTJ [1]	DSPRST	OUT: high	Reset output for DSP (H: reset)
108	XCASLL/ XCASL/ PTJ [2]	CASL	O	CASL (SDRAM)
109	VssQ	VssQ	–	Power supply (0V) for I/O
110	XCASLH/ XCASU/ PTJ [3]	FPGARST	OUT: high	Reset output for FPGA (H: reset)
111	VccQ	VccQ	–	Power supply (3.3V) for I/O
112	XCASHL/ PTJ [4]	CDRST B	OUT: high	TC9495F reset B (H: reset)
113	XCASHH/ PTJ [5]	CDRST A	OUT: high	TC9495F reset A (H: reset)
114	XDACK0/ PTD [5]	DACK0	O	FPGA DMA acknowledge 0
115	XDACK1/ PTD [7]	DACK1	O	FPGA DMA acknowledge 1
116	XCAS2L/ PTE [6]	LOADIN A	OUT: high	Loading motor control A (Lead-in direction moves with Low)
117	XCAS2H/ PTE [3]	LOADOUT A	OUT: high	Loading motor control A (Eject direction moves with Low)
118	XRAS3U/ PTE [2]	MUTE B	OUT: high	Audio output stage mute B (H: mute ON)
119	XRAS3U/ PTE [1]	MUTE A	OUT: high	Audio output stage mute A (H: mute ON)
120	TDO/ PTE [0]	TDO	OTHER	–
121	XBACK	BACK	O	NC
122	XBREQ	BREQ	I	Pull up
123	XWAIT	WAIT	I	Pull up
124	XRESETM	RESETM	I	Pull up
125	XADTRG/ PTH [5]	FPGA DONE	IN: pull-up	DONE for FPGA configulation
126	XIOIS16/ PTG [7]	RY/ XBY	IN: pull-up	Connect to flash ROM
127	XASEMD0/ PTG [6]	ASEMD0	OTHER	–
128	XASEBRKAK/ PTG [5]	ASEBRKAK	OTHER	–
129	PTG [4]	FPGA XINIT	IN: pull-up	INIT for FPGA configulation
130	AUDATA [3]/ PTG [3]	AUDATA [3]	OTHER	–
131	AUDATA [2]/ PTG [2]	AUDATA [3]	OTHER	–
132	Vss	Vss	–	Power supply (0V)
133	AUDATA [1]/ PTG [1]	AUDATA [1]	OTHER	–
134	Vcc	Vcc	–	Power supply (1.8V)
135	AUDATA [0]/ PTG [0]	AUDATA [0]	OTHER	–
136	XTRST/ PTF [7]/ PINT [15]	TRST	OTHER	–
137	TMS/ PTE [6]/ PINT [14]	TMS	OTHER	–
138	TDI/ PTE [5]/ PINT [13]	TDI	OTHER	–
139	TCK/ PTF [4]/ PNT [12]	TCK	OTHER	–
140	XIRLS [3]/ PTF [3]/ PINT [11]	LPS1 A	IN: pull-up	Loading switch A (switch ON: Low)
141	XIRLS [2]/ PTF [2]/ PINT [10]	LPS2 A	IN: pull-up	Loading switch A (switch ON: Low)
142	XIRLS [1]/ PTF [1]/ PINT [9]	LPS1 B	IN: pull-up	Loading switch B (switch ON: Low)
143	XIRLS [0]/ PTF [0]/ PINT [8]	LPS2 B	IN: pull-up	Loading switch B (switch ON: Low)
144	MD0	MD0	I	Pull down Clock mode setting
145	Vcc-PLL1	Vcc-PLL1	–	Power supply (1.8V) for PLL1
146	CAP1	CAP1	–	C External capacitance pin for PLL1
147	Vss-PLL1	Vss-PLL1	–	Power supply (0V) for PLL1
148	Vss-PLL2	Vss-PLL2	–	Power supply (0V) for PLL2
149	CAP2	CAP2	–	C External capacitance pin for PLL2
150	Vcc-PLL2	Vcc-PLL2	–	Power supply (1.8V) for PLL2
151	AUDCK/ PTH [6]	AUDCK	OTHER	–
152	Vss	Vss	–	Power supply (0V)
153	Vss	Vss	–	Power supply (0V)
154	Vcc	Vcc	–	Power supply (1.8V)
155	XTAL	XTAL	O	12MHz ceramic resonator
156	EXTAL	EXTAL	I	12MHz ceramic resonator

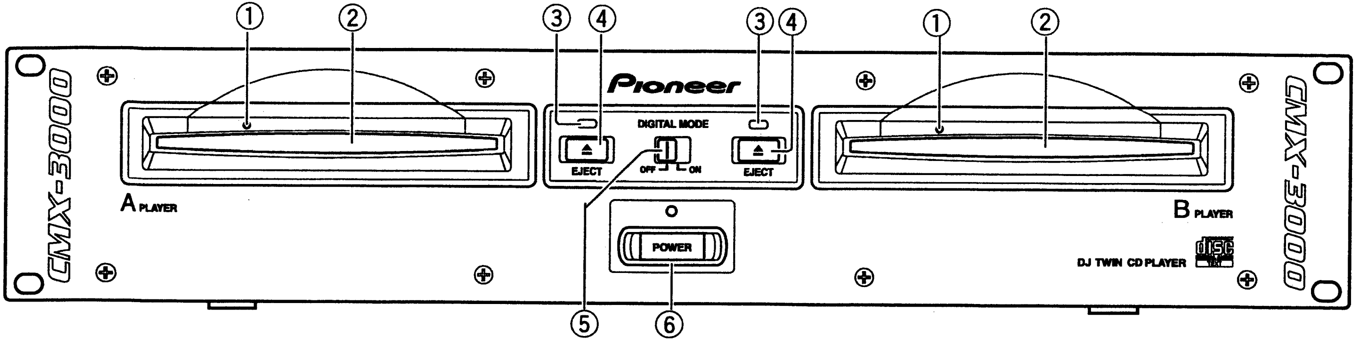
● Pin Function (4/4)

Pin No	Port Name	Pin Name	I/O	Function
157	STATUS0/ PTJ [6]	DAC ML B	OUT: high	LATCH B for DAC
158	STATUS0/ PTJ [7]	DAC ML A	OUT: high	LATCH A for DAC
159	TCLK/ PTH [7]	FPGA XPRG	OUT: high	PRG for FPGA configulation
160	XIRQOUT	NC	O	
161	VssQ	VssQ	–	Power supply (0V) for I/O
162	CKIO	CKIO	O	Clock output (48MHz) to FPGA and DSP
163	VccQ	VccQ	–	Power supply (3.3V) for I/O
164	TxD0/ SCPT [0]	DAC MD	O	Serial data / FPGA configulation for DAC
165	SOK0/ SCPT [1]	DAC MC	O	Serial clock / FPGA configulation for DAC
166	TxD1/ SCPT [2]	TXD1	OUT: high	DATA IN/ OUT communication output
167	SCK1/ SCPT [3]	BUSDR b	OUT:high	TC9495F I/F bus direction specification A (H: CPU to TC9495F)
168	TxD2/ SCPT [4]	TxD2	O	Serial communication output with the function section
169	SCK2/ SCPT [5]	DRVMUTE B	OUT:high	Loading driver IC mute B (H: mute ON)
170	SCK2/ SCPT [6]	DRVMUTE A	OUT:high	Loading driver IC mute A (H: mute ON)
171	RxD0/ SCPT [0]	NC	(IN: pull-up)	
172	RxD1/ SCPT [2]	RxD1	I	DATA IN/OUT Remote control unit communication input for service
173	Vss	Vss	–	Power supply (0V)
174	RxD2/ SCPT [4]	RxD2	I	Serial communication input with the function section
175	Vcc	Vcc	–	Power supply (1.8V)
176	CTS2/ IRQ5/ SCPT [7]	NC	(IN: pull-up)	
177	MCS [7]/ PTC [7]/ PINT [7]	XCDCE A	OUT: high	TC9495F chip enable signal A
178	MCS [6]/ PTC [6]/ PINT [6]	BUCK A	OUT: high	TC9495F microcomputer I/F clock signal A
179	MCS [5]/ PTC [5]/ PINT [5]	XCDCE B	OUT: high	TC9495F chip enable signal B
180	MCS [4]/ PTC [4]/ PINT [4]	BUCK B	OUT: high	TC9495F microcomputer I/F clock signal B
181	VssQ	VssQ	–	Power supply (0V) for I/O
182	XWAKEUP/ PTD [3]	BUS3 A	IN(Bidirection)	TC9495F microcomputer I/F data 3A
183	VccQ	VccQ	–	Power supply (3.3V) for I/O
184	XRESETOUT/ PTD [2]	BUS2 A	IN(Bidirection)	TC9495F microcomputer I/F data 2A
185	MCS [3]/ PTC [3]/ PINT [3]	BUS3 B	IN(Bidirection)	TC9495F microcomputer I/F data 3B
186	MCS [2]/ PTC [2]/ PINT [2]	BUS2 B	IN(Bidirection)	TC9495F microcomputer I/F data 2B
187	MCS [1]/ PTC [1]/ PINT [1]	BUS1 B	IN(Bidirection)	TC9495F microcomputer I/F data 1B
188	MCS [0]/ PTC [0]/ PINT [0]	BUS0 B	IN(Bidirection)	TC9495F microcomputer I/F data 0B
189	DRAK0/ PTD [1]	BUS1 A	IN(Bidirection)	TC9495F microcomputer I/F data 1A
190	DRAK1/ PTD [0]	BUS0 A	IN(Bidirection)	TC9495F microcomputer I/F data 0A
191	XDREQ0/ PTD [4]	DREQ0	I	FPGA DMA data request 0
192	XDREQ0/ PTD [6]	DREQ1	I	FPGA DMA data request 1
193	XRESETP	XRESET	I	Reset input
194	CA	CA	I	Pull up
195	MD3	MD3	I	Pull down Bus width setting for area 0
196	MD4	MD4	I	Pull up Bus width setting for area 0
197	MD5	MD5	I	Pull up Endure setting
198	AVss	AVss	–	Analog power supply (0V)
199	AN [0]/ PTL [0]	CDINSIDE B	IN: pull-up	Pickup inside SW B (switch ON: Low)
200	AN [1]/ PTL [1]	CDINSIDE A	IN: pull-up	Pickup inside SW A (switch ON: Low)
201	AN [2]/ PTL [2]	EJECT SW B	IN: pull-up	EJECT SW B (switch ON: Low)
202	AN [3]/ PTL [3]	EJECT SW A	IN: pull-up	EJECT SW A (switch ON: Low)
203	AN [4]/ PTL [4]	D MODE SW	IN: pull-up	DIGITAL MODE switching SW (DIGITAL ON: Low)
204	AN [5]/ PTL [5]	REMIN	(IN: pull-up)	DATA IN/ OUT insertion detecting pin (Jack insertion: High)
205	AVcc (3.3V)	AVcc (3.3V)	–	Analog power supply (3.3V)
206	AN [6]/ DA [1]/ PTL [6]	XUNIT	IN: pull-up	–
207	AN [7]/ DA [0]/ PTL [7]	NC	(IN: pull-up)	–
208	AVss	AVss	–	Analog power supply (0V)

8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

■ Player Section


①
②
③
④
③
④
①
②
CMX-3000
Pioneer
DIGITAL MODE
EJECT
OFF
ON
EJECT
A PLAYER
B PLAYER
POWER
DJ TWIN CD PLAYER
CMX-3000
⑤
⑥

① **Manual ejection hole**

② **Disc insertion slot**

When using 3 inch/8 cm discs, discs must be inserted in the commercially available CD adapter before insertion.

③ **Disc loading indicator**

This indicator flashes when a disc is being inserted into or ejected from the disc insertion slot and lights up when a disc has been inserted.

④ **EJECT button (⏏)**

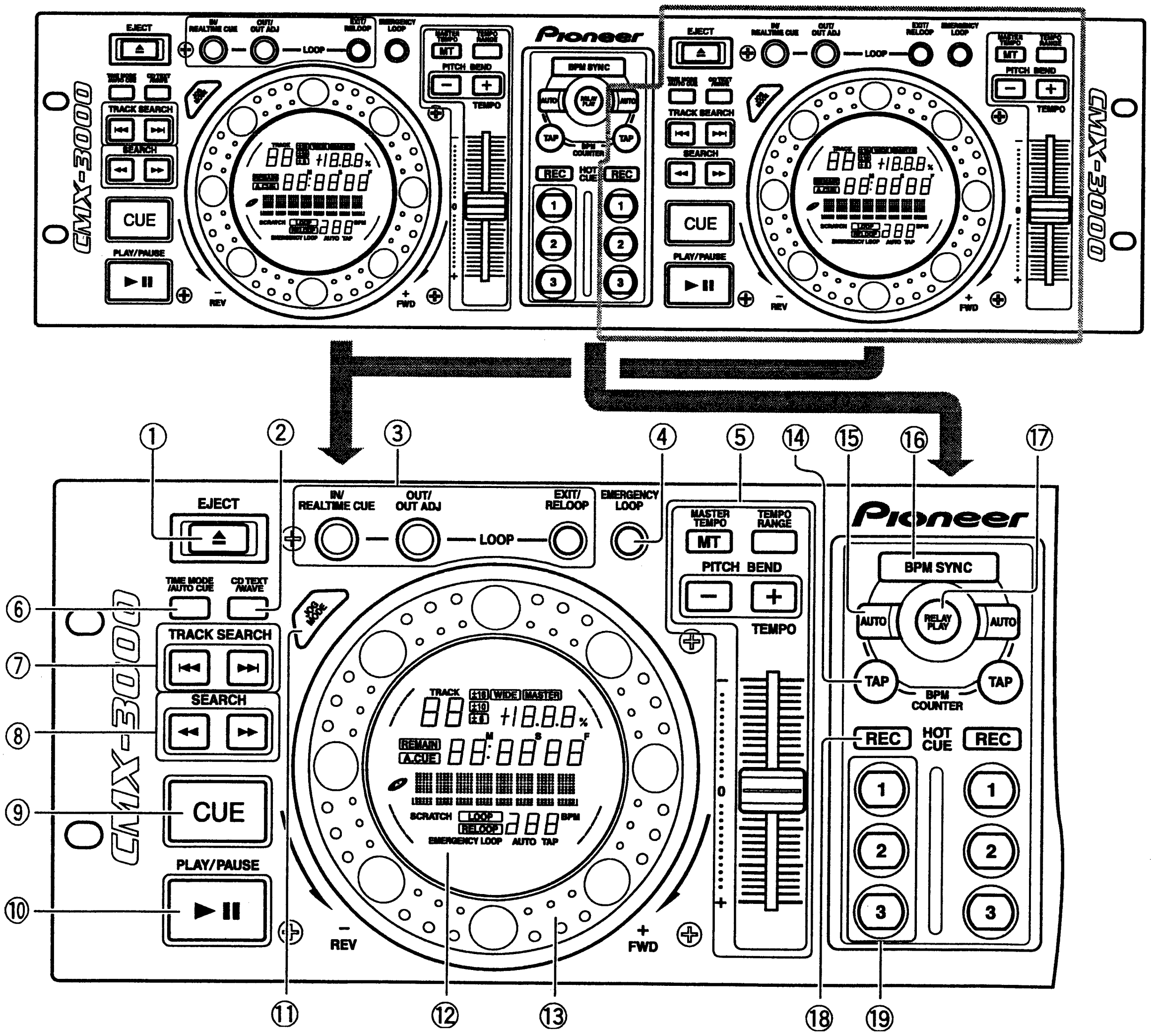
Pressing this button while cueing is on standby or play is paused will eject the disc from the player.

⑤ **DIGITAL MODE switch**

Set to On when the digital output is to be used. When set to On, the DJ functions do not function. (Functions marked * do not operate in this mode.) And the muted pause mode is used instead of the audible pause mode.

⑥ **POWER switch and indicator**

■ Remote Control Unit Section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③
④
⑤
⑭
⑮
⑯
⑰
EJECT
IN/ REALTIME CUE
OUT/ OUT ADJ
LOOP
EXIT/ RELOOP
EMERGENCY LOOP
MASTER TEMPO
TEMPO RANGE
MT
PITCH BEND
TEMPO
Pioneer
BPM SYNC
AUTO
RELAY PLAY
AUTO
TAP
BPM COUNTER
TAP
REC
HOT CUE
REC
1
2
3
1
2
3
⑥
TIME MODE /AUTO CUE
CD TEXT /WAVE
⑦
TRACK SEARCH
⑧
SEARCH
⑨
CUE
PLAY/PAUSE
⑩
CMX-3000
REV
FWD
TRACK
WIDE
MASTER
REMAIN
A.CUE
SCRATCH
LOOP
RELOOP
BPM
EMERGENCY LOOP
AUTO
TAP
⑪
⑫
⑬
⑱
⑲

Operation buttons indicated by an asterisk (*) are not supported in digital mode.

① EJECT button (⏏)

② CD TEXT/WAVE button

Each time the button is pressed the function changes alternately as follows:

→ WAVE display ——→ CD TEXT ——→ CD TEXT
disc title display track title display

During digital mode, switches between
CD TEXT ←——→ CD TEXT
disc title display track title display

③ LOOP control buttons (*)

④ EMERGENCY LOOP button (*)

When this button is pressed, the current point is set as the loop in-point, and loop play begins with an automatically set out-point.

⑤ TEMPO controls (*)

Tempo control range button (TEMPO RANGE):
Pressing this button causes the variable range of the tempo control slide to change each time the button is pressed.

MASTER TEMPO button and indicator:
Pressing this button causes the master tempo feature to be powered on or off each time it is pressed.

Tempo control slide:
Moving this slider in the positive (+) direction away from the center position (normal playback tempo) causes the tempo to become faster, and moving it in the negative (–) direction causes the tempo to become slower.

PITCH BEND buttons (+, –):
When pressed during playback, causes pitch bend. Pressing the "+" button causes pitch to accelerate, while pressing the "–" button causes pitch to decelerate.

⑥ Time mode/Auto cueing button (*) (TIME MODE/AUTO CUE)

TIME MODE:
Pressing this button causes the elapsed time and remaining time (REMAIN) of the current track to be displayed in succession on the time display of the display unit.

AUTO CUE:

⑦ TRACK SEARCH button (|◀◀, ▶▶|)

⑧ SEARCH button (◀◀, ▶▶)

⑨ CUE button and indicator (*)

Cueing point settings
Cueing point sampler
Back cueing
Cueing point adjust

⑩ PLAY/PAUSE button (▶ II) and indicator

⑪ JOG MODE button (*)

Each time this button is pressed, the jog mode switches alternately between CDJ jog mode and SCRATCH jog mode.

⑫ Display

⑬ Jog dial (+ FWD/– REV) (*)

⑭ TAP button (*)

When pressed during playback, the BPM counter switches to manual mode, and the BPM value is calculated from the interval at which the TAP button is pressed. A BPM value in the range 40 to 199 BPM (varies with the tempo change rate) can be entered when the tempo change rate is 0%.

⑮ AUTO button (*)

Press for automatic BPM count

⑯ BPM synchro button (BPM SYNC) and indicator (*)

Each time the button is pressed, switches BPM synchro function ON/OFF. BMP SYNC indicator flashes during ON, and lights steadily when OFF.

⑰ RELAY PLAY button and indicator (*)

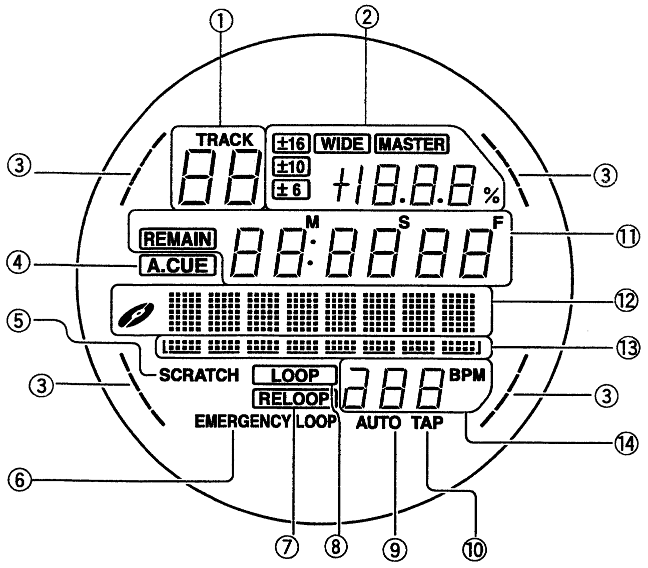
⑱ HOT CUE recording mode button (REC) and indicator (*)

Press to switch the HOT CUE button's function (record/access). In the record mode, the indicator lights.

⑲ HOT CUE buttons (1, 2, 3) and indicator (*)

Use to select the memory (1, 2, 3) into which you wish to program hot cue point information, loop information, and scratch mode information.

■ Display



① **TRACK number display**
Displays the track number of the track currently being played.

② **Playback speed display**
Tempo control range display (±6, ±10, ±16, WIDE)
Displays the variable range mode of the tempo control slide.
MASTER indicator
MASTER indicator on the master player lights during BPM synchro play.
Tempo change rate display
Displays the rate of change of the tempo as specified using the tempo control slide.

③ **Ring display**
During relay play, displays disc rotation status. During BPM synchro mode, the display occurs in rhythm with the beat.

④ **Auto cueing indicator (A. CUE)**
Lights up when auto cueing is turned on.

⑤ **SCRATCH indictor**
When jog mode is set to "SCRATCH," flashes during write to the scratch memory, and lights steadily when data is fully written to the memory.

⑥ **EMERGENCY LOOP indicator**
Flashes during loop play in the Emergency Loop mode.

⑦ **RELOOP indicator**
Lights to indicate loop play is possible, and during loop play.

⑧ **LOOP indicator**
Lights during loop play.

⑨ **Automatic BPM Count indicator (AUTO)**
Lights during automatic BPM count mode.

⑩ **TAP mode indicator**
Lights during TAP BPM count mode. Indicator goes out for approximately 0.2 second the instant TAP button is pressed.

⑪ **Time display**
Used to display the elapsed playback time (when the REMAIN indicator is unlit) or the remaining playback time (when the REMAIN indicator is lit) of the current track in minutes (M), seconds (S), and frames (F).

⑫ **WAVE Display / Character Display**
During WAVE display, indicates the volume level of the currently playing track. During character display, displays CD TEXT. Characters displayable are limited to alphabet, numerals, and certain symbols. The array displays either the disc title or the track title. When disc title is displayed, the 🖉 mark lights.

⑬ **Playback position display**
Used to display a full-scale bar graph for the track being played to make it possible to get an intuitive feel of the elapsed and remaining play time.

- Display as it appears when displaying elapsed time:
  All indicators unlit and then indicators light up in sequence from left
- Display as it appears when displaying remaining time:
  All indicators lit and then indicators are turned off in sequence from left
- Display as it appears when there are less than 30 seconds remaining in a track:
  Slow flashing
- Display as it appears when there are less than 15 seconds remaining in a track:
  Rapid flashing

⑭ **BPM display**
Used to display the number of BPM for the current track. Note that it may not be possible to count BPM in the automatic BPM count mode for some tracks. Then use the TAP BPM count mode to do this.

8.2 SPECIFICATIONS

■ CMX-3000/KUXJ

1. General

System	Compact disc digital audio system
Discs used	Compact discs
Power requirements	AC 120 V, 60 Hz
Power consumption	49 W
Operating temperature	+5°C to +35°C (+41°F to +95°F)
Operating humidity	5% to 85% (There should be no condensation of moisture.)
Weight	
Remote controller	2.0 kg (4 lbs 7 oz)
Player	5.6 kg (12 lbs 6 oz)
Dimensions	
Remote controller	482 (W) x 132 (D) x 82 (H) mm 18-31/32 (W) x 5-3/16 (D) x 3-7/32 (H) in.
Player	482 (W) x 252 (D) x 90 (H) mm 18-31/32 (W) x 9-15/16 (D) x 3-9/16 (H) in.

2. Audio section

Frequency response	4 Hz to 20 kHz
Signal-to-noise ratio	115 dB or more
Distortion rate	0.006%

3. Accessories

● Operating instructions	1
● Power cord	1
● Audio cable	2
● Control cord	2
● Forced ejection pin	1
● Specialized connection cable for the remote controller	1
● Limited warranty	1

NOTE:

Specifications and design are subject to possible modification without notice.

■ CMX-3000/WYXJ

1. General

System	Compact disc digital audio system
Discs used	Compact discs
Power requirements	AC 220-240 V, 50/60 Hz
Power consumption	49 W
Operating temperature	+5°C to +35°C
Operating humidity	5% to 85% (There should be no condensation of moisture.)
Weight	
Remote controller	2.0 kg
Player	5.6 kg
Dimensions	
Remote controller	482 (W) x 132 (D) x 82 (H) mm
Player	482 (W) x 252 (D) x 90 (H) mm

2. Audio section

Frequency response	4 Hz to 20 kHz
Signal-to-noise ratio	115 dB or more
Distortion rate	0.006%

3. Accessories

● Operating instructions	1
● Power cord	1
● Audio cable	2
● Control cord	2
● Forced ejection pin	1
● Specialized connection cable for the remote controller	1

NOTE:

Specifications and design are subject to possible modification without notice.

■ CMX-3000/RLBXJ

1. General

System	Compact disc digital audio system
Discs used	Compact discs
Power requirements	AC 110-120 V/220-240 V, 50/60 Hz
Power consumption	49 W
Operating temperature	+5°C to +35°C
Operating humidity	5% to 85% (There should be no condensation of moisture.)
Weight	
Remote controller	2.0 kg
Player	5.6 kg
Dimensions	
Remote controller	482 (W) x 132 (D) x 82 (H) mm
Player	482 (W) x 252 (D) x 90 (H) mm

2. Audio section

Frequency response	4 Hz to 20 kHz
Signal-to-noise ratio	115 dB or more
Distortion rate	0.006%

3. Accessories

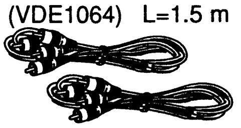
● Operating instructions	1
● Power cord	1
● Audio cable	2
● Control cord	2
● Forced ejection pin	1
● Specialized connection cable for the remote controller	1

NOTE:

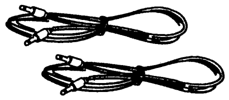
Specifications and design are subject to possible modification without notice.

■ Accessories

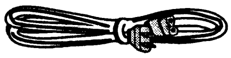
Audio Cable x2
(VDE1064) L=1.5 m



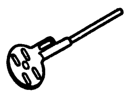
Control Cord x2
(PDE1267) L=1 m



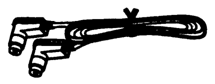
Power Cord x1
(KUXJ type : ADG7022
(WYXJ, TLXJ type: ADG1154)



Forced Ejection Pin x1
(DEX1013)



Specialized connection cable
for the remote controller
(DDE1122) L=3 m x1



Operating instructions

Limited warranty (KUXJ type only)